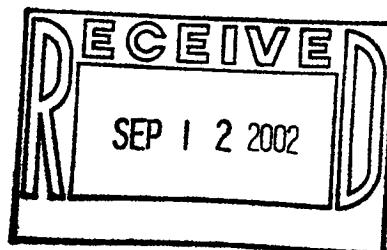


905 Sheehy Drive, Bldg. A
Horsham, PA 19044
Telephone: (215) 443-8710
Telefax: (215) 443-8587


ARGUS RESEARCH
Charles River Laboratories
Discovery and Development Services

September 11, 2002

John Butenhoff, Ph.D., DABT, CIH
3M Corporate Toxicology
3M Medical Department
3M Center, Building 220-2E-02
St. Paul, Minnesota 55144-1000



Telephone: (651) 733-1962
Telefax: (651) 733-1773

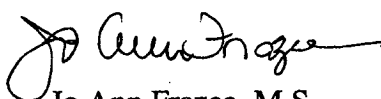
RE: Protocol 418-020 - Oral (Gavage) Two-Generation (One Litter per Generation)
Reproduction Study of Ammonium Perfluorooctanoate (APFO) in
Rats
Sponsor's Study Number: T-6889.6

Dear Dr. Butenhoff:

Enclosed are the copies of the estrous cycle evaluation for P and F1 generation rats which you requested.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jo Ann Frazee".

Jo Ann Frazee, M.S.
Study Coordinator

Enc.

002947a

ESTROUS CYCLE EVALUATION
P GENERATION FEMALE RATS

EXACT COPY

87 9/11/02

0029476

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO	TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 0 (Vehicle) MKD	GENERATION: P	ROUTE: Oral (Gavage)
		SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Saline Pre-Check Tech/Time	alc 1123	alc 1126	alc 1133	alc 1120	JTB 1132	JTB 1120	JTB 1124	PA 1122	PA 1133	803 1134	PA 1115	844 1133	PA 1114	PA 1125
Saline Post-Check Tech/Time	alc 1200	alc 1155	alc 1200	803 1150	PA 1205	JTB 1147	JTB 1150	1200 803	1158 803	1200 803	PA 1213	803 1202	PA 1146	PA 1153
Smears Taken Tech/Time Start	alc/PA/PA 1130	alc/PA/PA 1131	alc/PA/PA 1134	alc/PA/PA 1128	2A/JTB 1135	DIFF/PA 1124	JTB/PA/PA 1125	PA/PA/PA 1126	PA/PA/PA 1135	PA/PA/PA 1141	PA/PA/PA 1140	PA/PA/PA 1136	PA/PA/PA 1130	PA/PA/PA 1124
Smears Taken Time End	1158	1152	1158	1151	1202	1146	1149	1157	1155	1159	1211	1200	1145	1152
Smears Read Tech/Time Start	alc/PA/PA 1201	alc 1155	alc 1200	803 1154	2A/JTB 1206	JTB/PA/PA 1147	JTB/PA/PA 1150	1201 803	1158 803	1201 803	PA 1214	803 1202	PA 1146	PA 1153
Smears Read Time End	1223	1245	1245	803 1231	2A/JTB 1325	1202	1205	1258	1230	1230	1240	803 1202	PA 1202	PA 1211
Animal Number														
13801	D	D	D	E	M	D	P	E	M	D	P	E	M	D
13802	D	D	E	D	D	E	E	D	E	D	E	D	D	P
13803	M	D	P	E	M	D	P	E	D	D	P	E	D	D
13804	E	E	M	D	803 P	E	M	D	P	E	M	D	D	E
13805	D	E	M	D	803 P	E	M	D	E	E	M	D	E	E
13806	E	E	D	D	P	E	D	D	803 P	803 P	D	D	E	E
13807	D	D	E	D	D	P	E	D	D	P	E	M	D	P
13808	E	E	D	D	803 P	E	M	D	P	E	D	D	E	E
13809	E	D	D	P	E	D	D	P	E	M	D	P	E	M
13810	P	D	E	D	D	E	E	D	D	P	E	D	D	D
13811	D	E	803 P	D	D	E	E	M	D	D	E	M	D	D
13812	E	E	803 P	D	P	E	D	D	D	D	D	D	D	P

Reviewed By:

M. Martin

Date:

1-15-01

RT 01.14.00 EC2-04a

① Slides 13801-13812 read by ALC Slides 13873-13950 read by MPH. MPH 1-1-01

② 803 1/3/01 ③ 803 1/4/01

④ A 2A 1-5-01

⑤ MPH 1-1-01

⑥ 803 1/7/01 ⑦ 803 1/10/01

⑧ 803 1/5/01

⑨ Deviation written 803 1/16/01

EXACT COPY

J 91102

002948

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 0 (Vehicle) MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crt:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13813	E	M	D	P	E	M	D	P	E	M	D	P	E	M
13814	D	D	P	E	M	D	P	E	E	M	D	D	E	E
13815	E	M	D	P	E	E	M	D	P	E	E	D	D	D
13816	D	D	E	M	D	E	E	M	D	P	E	M	D	D
13817	M	D	P	E	M	E	D	E	D	D	P	E	D	D
13818	D	P	E	E	M	D	E	E	M	D	D	E	D	D
13819	P D	P	E	D	D	E	E	D	D	P	E	M	D	P
13820	P	E	M	D	P	E	M	E	P	E	M	E	P	E
13821	E	D	D	P	E	D	D	P	E	D	D	E	E	M
13822	E	M	D	P	E	M	D	P	E	D	D	P	M	D
13823	E	M	D	D (3)	E	M	D	P	E	M	D	D	E	D
13824	E	D	D	D (3)	E	M	D	P	E	M	D	E	E	D
13825	D	E	E (3)	M	D	P	P	D	D	D (3)	P	M	D	D
13826	P	E	M	D	P	E	M	D	P	E	D	D	D	E
13827	E	D	D	P	E	M	D	P	E	D	D	P	E	D
13828	P	E	M	D	P	E	M	D	P	E	M	D	D	E
13829	E	E	D	D	P	E	M	D	P	E	M	D	P	E
13830	E	D	D	P	E	D	D	P	E	D	D	D	E	M

① AUC 1-1-01
② AUC 1-13-01

③ AUC 1-14-01
④ AUC 1-14-01

Reviewed By: _____

M. Martini

Date: _____

1-15-01

RT 01.14.00 EC2-04b

EXACT COPY

J7 911102

002949

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 1 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13831	D	D	E	E	M	D	DE E	E	D	D	DE E	E	D	D
13832	E	D	D	D	E	M	DE D	D	E	M	D	D	E	D
13833	D	P	E	M	D	P	DE E	M	D	P	E	D	D	P
13834	D	P	E	M	D	P	DE E	M	D	P	E	D	D	P
13835	D	E	E	D	D	P	E	D	D	P	E	D	D	P
13836	P	E	D	D	P E	E	M	D	P	E	D			
13837	E	E	D	D	D	E	M	D	P	E	M	D	E	E
13838	P	E	D	D	D	E	M	D	D	P	E	D	D	D
13839	D	P	E	M	D	P	E	M	D	P	E	M	D	D
13840	D	P	E	M	D	E	E	E	M	D	D	E	E	E
13841	E	E	M	D	D	E	D	D	P	E	M	D	D	E
13842	E	E	D	D	P	E	D	D	P	E	D	D	D	E
13843	E	D	D	P	E	D	D	E	E	DE M	D	P	E	M
13844	P	E	M	D	P	E	M	D	E	E	D	D	E	E
13845	E	E	D	D	P	E	D	D	P	E	M	D	D	E
13846	M	D	E	D	D	D	E	M	D	P	E	M	D	D
13847	P	E	D	D	P	E	D	D	D	E	D	D	E	E
13848	E	D	D	DE E	DE M	D	D	E	M	DE P	P	E	D	D
13849	D	D	P	E	M	D	P	E	D	P	E	E	D	D

① 13831 1-4-01 ② 13832 1-5-01 ③ 13833 1-6-01 ④ 13834 1-7-01 ⑤ 13835 1-8-01 ⑥ 13836 1-9-01 ⑦ 13837 1-10-01 ⑧ 13838 1-11-01 ⑨ 13839 1-12-01 ⑩ 13840 1-13-01 ⑪ 13841 1-14-01 ⑫ 13842 1-15-01 ⑬ 13843 1-16-01 ⑭ 13844 1-17-01 ⑮ 13845 1-18-01 ⑯ 13846 1-19-01 ⑰ 13847 1-20-01 ⑱ 13848 1-21-01 ⑲ 13849 1-22-01

Reviewed By:

M. Martin

Date:

1-15-01

C. O'Brien 8-9-01

⑤ 13831 1-11-01

⑥ Animal Sacrificed

on 1/11/01
⑦ 13832 1/11/01
⑧ 13833 1/11/01
⑨ 13834 1/11/01

RT 01.14.00 EC2-04b

EXACT COPY

9/11/02

002950

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 1 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

[illegible]

(1) A803 11/3/00 (2) A804 11/5/01 (3) A805 11/7/01

Reviewed By:

M. Martin.

Date:

1-15.01

RT 01.14.00 EC2-04b

EXACT COPY

7 aluloa

002951

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 3 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13861	E	E	D	D	P	P	E	D	D	P	E	E	D	D
13862	E	M	D	P	E	D	D	P	E	D	D	P	E	D
13863	D	E	E	D	D	P	E	D	D	E	E	D	D	D
13864	E	E	M	D	D	P	E	D	D	P	E	E	D	D
13865	P	E	D	D	P	E	M	D	P	E	M	D	D	E
13866	E	E	M	D	D	E	E	D	D	P	E	E	D	D
13867	D	D	P	P	E	M	D	D	E	D	D	E	D	D
13868	E	M	D	P	E	M	D	P	E	M	D	P	E	M
13869	E	D	D	D	E	M	D	D	E	M	D	D	E	M
13870	P	E	D	D	P	E	D	D	P	E	M	D	P	E
13871	D	P	E	M	D	P	E	M	D	P	E	M	D	P
13872	E	M	D	D	E	D	D	D	E	D	D	D	E	D
13873	E	D	D	P	E	D	D	D	E	D	D	D	E	D
13874	P	E	E	D	D	D	E	E	D	D	P	E	E	D
13875	P	E	D	D	E	E	D	D	P	E	M	E	D	E
13876	E	E	M	D	D	E	D	D	P	E	D	D	D	E
13877	E	M	D	D	E	M	D	P	E	D	D	P	E	E
13878	M	D	P	E	D	D	E	E	M	D	P	E	D	D
13879	D	E	D	D	D	E	M	D	D	E	M	D	D	E

① 1/15/01

② 1/12/01

Reviewed By:

M. Martin

Date:

1-15-01

RT 01.14.00 EC2-04b

EXACT COPY

87 911102

002952

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 3 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Cri:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13880	E	E	D	D	D	E	M	D	D	P	E	D	D	E
13881	P	E	D	D	P	E	E	M	D	P	E	E	D	D
13882	M	D	E	D	M	D	P	E	M	D	E	E	D	D
13883	D	E	M	D	D	E	D	D	D	E	D	D	D	E
13884	M	D	P	E	M	D	P	E	D	D	D	D	E	D
13885	E	E	E	E	E	E	E	E	E	E	E	E	E	E
13886	E	D	D	P	E	E	M	E	E	E	E	E	E	E
13887	E	D	D	D	E	D	D	P	E	M	D	P	E	D
13888	M	E	D	D	D	E	D	D	P	E	D	D	D	E
13889	E	E	M	D	P	E	D	D	D	E	D	D	E	E
13890	E	D	D	D	E	D	P	E	E	D	D	D	E	M

002952 at 1/14/01

Reviewed By:

M. Martin

Date:

1-15-01

RT 01.14.00 EC2-04b

EXACT COPY

JF 9/1/02

002953

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 10 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13891	E	M	D	P	E	D	D	P	E	M	D	P	E	D
13892	E	D	D	P	E	D	D	P	E	D	D	P	E	M
13893	D	E	M	D	D	E	D	D	D	E	D	D	D	E
13894	D	D	E	M	D	P	E	D	D	D	E	D	D	D
13895	D	E	E	M	D	D	E	M	D	E	E	M	D	D
13896	E	D	D	E	E	D	D	D	E	D	P	D	D	P
13897	E	D	D	D	E	D	D	E	E	D	D	E	E	D
13898	P	E	M	D	P	E	D	D	P	E	M	D	D	E
13899	D	P	E	M	D	P	E	D	D	P	E	M	D	D
13900	D	P	E	E	E	M	P	P	E	E	E	E	P	E
13901	M	D	P	E	M	P	P	E	D	D	E	M	D	D
13902	D	P	E	D	D	P	E	M	D	P	E	M	D	P
13903	M	D	P	E	D	D	P	E	D	D	P	E	M	D
13904	M	D	E	E	D	P	D	E	M	D	D	D	P	D
13905	D	P	E	M	D	D	P	M	E	M	D	D	P	E
13906	E	D	D	D	E	D	P	D	E	M	D	D	E	D
13907	E	E	D	D	D	P	D	P	E	M	D	D	D	E
13908	P	E	M	D	P	E	D	D	P	E	D	D	E	E
13909	E	D	D	P	E	D	D	P	E	D	D	P	E	D

① 002953 1/7/01

② 002953 1/12/01

Reviewed By: _____

M. Martin

Date: _____

1-15-01

RT 01.14.00 EC2-04b

EXACT COPY

JF quilloz

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 10 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

[illegible]

6/8/01 11/2/01

Reviewed By:

M. Martini

Date:

1-15.01

RT 01.14.00 EC2-04b

EXACT COPY

961102

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 30 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13921	D	D	E	D	D	P	E	D	D	D	E	D	D	P
13922	D	D	E	D	D	D	E	D	D	D	DE	D	D	P
13923	E	E	D	D	P	E	M	D	P	E	D	D	P	E
13924	P	E	D	D	P	E	M	D	P	E	M	D	P	E
13925	E	M	D	P	E	M	D	P	E	M	E	P	E	D
13926	D	D	E	M	D	P	E	M	D	P	E	M	D	D
13927	D	P	E	M	D	P	E	M	D	P	E	M	D	P
13928	P	E	M	D	D	E	D	D	D	E	M	D	D	E
13929	D	D	P	E	E	E	M	M	M	E	E	E	E	E
13930	D	P	E	M	D	P	E	D	D	P	E	M	D	D
13931	E	D	D	D	E	D	D	P	E	M	D	P	E	D
13932	D	D	P	E	M	D	D	E	D	D	D	E	M	D
13933	D	E	E	E	M	M	P	E	M	D	E	E	E	E
13934	E	D	D	E	E	M	D	P	E	D	D	E	E	D
13935	E	E	M	D	D	P	E	D	D	E	E	M	D	D
13936	E	E	D	D	E	D	P	P	E	D	D	D	E	D
13937	D	D	E	E	D	P	P	E	D	D	D	E	D	D
13938	D	E	E	D	D	P	E	D	D	P	E	D	D	P
13939	D	E	E	D	D	P	E	D	D	D	E	D	D	D

002955 1-11-01

Reviewed By:

M. Martin

Date:

1-15-01

RT 01.14.00 EC2-04b

EXACT COPY

941102

002956

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 30 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-1-01	1-2-01	1-3-01	1-4-01	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-10-01	1-11-01	1-12-01	1-13-01	1-14-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13940	E	D	D	D	E	M	D	D	P	P	E	M	D	D
13941	D	E	D	D	D	E	D	D	D	E	M	D	P	E
13942	P	E	D	D	P	M	D	D	P	E	M	D	D	E
13943	E	D	D	D	E	D	D	D	D	E	D	D	D	E
13944	D	P	E	M	D	D	E	E	D	P	E	M	D	P
13945	D	E	E	D	D	P	E	M	D	E	E	D	D	D
13946	E	M	D	P	E	D	P	P	E	E	D	P	E	D
13947	D	E	E	D	D	D	E	M	D	D	E	E	D	D
13948	D	D	D	E	M	M	D	E	M	E	D	P	E	D
13949	M	D	E	E	M	P	P	E	M	E	E	E	D	D
13950	E	D	D	P	E	M	P	E	E	D	D	P	E	M

① Dec 1-3-01

Reviewed By:

M. Martin

Date:

1-15-01

RT 01.14.00 EC2-04b

EXACT COPY
of original

002957

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 0 (Vehicle) MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

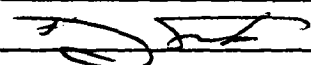
P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-15-01	1-16-01	1-17-01	1-18-01	1-19-01	1-20-01	1-21-01							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Saline Pre-Check Tech/Time	VHL/ 1135	1115 803	1129 KML	1130 803	1120 81	1129 JSC	1129 CAR							
Saline Post-Check Tech/Time	VHL/ 1206	803 1142	KML 1156	803 1200	KML 1153	1208 JL	1238 JL							
Smears Taken Tech/Time Start	VHL/1136 1136	1117 803 1141	1132 KML 1141	1135 KML 1141	1127 KML 1141	1132 JSC 1141	1131 CAR 1141							
Smears Taken Time End	1204	1140	1154	1159	1153	1256	1154							
Smears Read Tech/Time Start	VHL/ 1207	803 1143	803 1205	803 1201	KML 1154	1209 JL	1238 JL							
Smears Read Time End	1249	1206	1304	1254	1243	1253	1336							
Animal Number														
13801	P	E	D	D	E	E	D							
13802	E	D	D	D	E	D	P							
13803	P	E	D	D	D	E	E							
13804	D	D	P	E	①									
13805	D	D	P	E	D	P	D							
13806	D	D	P	E	D	D	P							
13807	E	M	D	P	E	D	D							
13808	M	D	P	E	M	D	P							
13809	D	P	E	M	D	P	E							
13810	E	D	D	D	E	M	D							
13811	D	D	D	D	D	P	E							
13812	D	D	D	D	D	E	D							

Reviewed By: 

Date: 1/25/01

① Animal was moribund sacrificed. 803 1/19/01

RT 01.14.00 EC2-04a

EXACT COPY

JF 911102

002958

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 0 (Vehicle) MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-15-01	1-16-01	1-17-01	1-18-01	1-19-01	1-20-01	1-21-01							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13813	D	E	E	M	D	P	E							
13814	M	D	D	P	E	M	D							
13815	E	E	M	D	D	P	E							
13816	P	E	M	D	D	P	E							
13817	E	E	M	D	E	E	M							
13818	P	E	M	D	P	E	M							
13819	E	M	D	E	E	D	D							
13820	M	D	D	E	E	D	D							
13821	D	D	E	M	D	P	E							
13822	D	P	E	M	D	P	E							
13823	D	P	E	M	D	P	E							
13824	E	D	E	M	D	E	E							
13825	E	M	D	D	P	E	M							
13826	D	D	D	E	D	P	E							
13827	D	E	E	M	D	P	E							
13828	M	D	P	E	D	D	P							
13829	D	D	P	E	D	D	P							
13830	D	D	E	D	D	P	E							

Reviewed By: [Signature]Date: 1/25/01

RT 01.14.00 EC2-04b

EXACT COPY

Jt 911102

002959

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 1 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Cr:CD® (SD) IGS BR VAF/Plus®

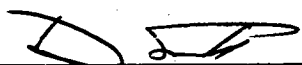
P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-15-01	1-16-01	1-17-01	1-18-01	1-19-01	1-20-01	1-21-01							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13831	D	E	D	D	D	E	M							
13832	D	D	E	M	D	D	E							
13833	E	D	D	P	E	M	D							
13834	E	M	D	P	E	D	D							
13835	E	D	D	P	E	D	D							
13836														
13837	D	D	P	E	D	D	E							
13838	P	P	D	D	D	D	D							
13839	E	D	D	P	E	D	D							
13840	D	P	E	D	D	D	E							
13841	D	D	E	E	D	D	D							
13842	D	D	P	E	D	D	D							
13843	D	P	E	M	D	P	E							
13844	M	D	P	E	D	D	P							
13845	M	D	P	E	D	D	P							
13846	E	E	M	D	D	E	E							
13847	D	D	P	E	D	D	P							
13848	D	D	E	D	D	E	E							
13849	P	E	M	D	P	E	M							

Reviewed By: Date: 1/25/01

RT 01.14.00 EC2-04b

EXACT COPY

8 911102

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 1 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

[illegible]

Reviewed By:

Date:

RT 01.14.00 EC2-04b

EXACT COPY
N 911102

002961

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 3 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-15-01	1-16-01	1-17-01	1-18-01	1-19-01	1-20-01	1-21-01							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13861	D	E	E	D	D	D	P							
13862	D	P	E	D	D	P	E							
13863	E	D	D	P	E	D	D							
13864	E	E	M	D	D	E	E							
13865	M	D	P	E	D	D	P							
13866	D	E	E	D	D	D	D							
13867	D	D	E	M	D	P	E							
13868	D	P	E	D	D	P	E							
13869	P	D	E	D	D	D	E							
13870	D	D	P	E	D	D	P							
13871	E	D	D	P	E	D	D							
13872	D	D	E	D	D	D	E							
13873	D	P	E	D	D	P	E							
13874	D	P	E	E	D	D	P							
13875	M	D	P	E	D	D	D							
13876	M	D	P	E	D	D	P							
13877	M	D	D	E	E	D	D							
13878	P	E	M	M	D	P	E							
13879	D	D	D	E	D	D	E							

Reviewed By: Date: 1/25/01

RT 01.14.00 EC2-04b

EXACT COPY

9/11/02

002962

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 3 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

D = Diestrus														
DATE	1-15-01	1-16-01	1-17-01	1-18-01	1-19-01	1-20-01	1-21-01							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13880	D	D	P	E	D	D	P							
13881	E	E	M	D	D	P	E							
13882	E	E	M	D	R ³ ₂	E	M							
13883	M	D	D	E	D	D	D							
13884	D	P	E	D	D	D	E							
13885	E	M	M	E	E	E	E							
13886	E	E	M	E	E	E	E							
13887	D	P	E	D	D	P	E							
13888	D	D	D	E	D	D	P							
13889	M	D	D	E	D	D	P							
13890	D	D	E	D	D	D	E							

D(R) LMC 1-19-09

Reviewed By:

Date:

RT 01.14.00 EC2-04b

③ estrus cycle inadvertently, not recorded on 1/25/61

EXACT COPY

9/11/02

002963

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO	TYPE OF TEST: Estrous Cycle Evaluation	
DOSAGE: 10 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

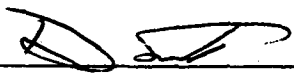
P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-15-01	1-16-01	1-17-01	1-18-01	1-19-01	1-20-01	1-21-01							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13891	D	D	E	M	D	D	E							
13892	D	D	E	M	D	P	E							
13893	D	D	D	E	D	D	P							
13894	E	D	D	D	E	D	D							
13895	E	M	D	P	E	M	D							
13896	E	D	D	D	E	D	D							
13897	D	D	E	D	D	D	E							
13898	M	D	P	E	D	D	P							
13899	P	E	D	D	D	E	D							
13900	E	E	E	E	E	E	E							
13901	E	E	M	D	D	P	E							
13902	E	D	D	P	E	D	P							
13903	P	E	M	D	P	E	M							
13904	D	D	D	P	P	D	D							
13905	E	D	D	P	E	E	D							
13906	D	D	E	M	D	P	E							
13907	M	D	P	E	D	D	P							
13908	D	D	P	E	M	D	P							
13909	P	P	E	M	D	P	E							

Reviewed By: Date: 1/25/01

RT 01.14.00 EC2-04b

EXACT COPY

911102

002965

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 30 MKD	GENERATION: P	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	1-5-01	1-6-01	1-7-01	1-8-01	1-9-01	1-20-01	1-21-01							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
13921	E	D	D	P	E	D	D							
13922	E	D	D	P	E	D	D							
13923	D	D	P	E	D	D	P							
13924	M	D	P	E	D	E	P							
13925	D	P	E	M	D	P	E							
13926	E	M	D	P	E	D	P							
13927	E	D	D	P	E	D	P							
13928	M	D	P	E	D	D	P							
13929	E	E	E	E	M	E	E							
13930	E	M	D	P	E	D	P							
13931	D	P	E	M	D	P	E							
13932	P	E	D	D	D	E	D							
13933	D	P	E	M	D	E	E							
13934	D	P	E	M	D	P	E							
13935	E	E	M	E	E	D	D							
13936	D	D	E	D	D	D	E							
13937	E	E	D	P	D	E	M							
13938	E	M	D	P	P	D	D							
13939	E	M	D	P	E	D	D							

Reviewed By: [Signature]Date: Dec 1/25/01

(000001/25/01) RT 01.14.00 EC2-04b

EXACT COPY

JF 9/11/02

Argus

9/11/02

012431

ESTROUS CYCLE EVALUATION
F1 GENERATION FEMALE RATS

EXACT COPY
9/11/02

012432

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO	TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)
		SPECIES/STRAIN: Rat/Crt:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	5-8-01	5-9-01	5-10-01	5-11-01	5-12-01	5-13-01	5-14-01	5-15-01	5-16-01	5-17-01	5-18-01	5-19-01	5-20-01	5-21-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Saline Pre-Check Tech/Time	MPH 1235	PH 1235	PH 1242	PH 1244	PH 1253	MKF 1231	MPH 1240	MPH 1241	DC 1232	MPH 1228	MPH 1230	MPH 1255	MKF 1201	MPH 1240
Saline Post- Check Tech/Time	MPH 1309	PH 1332	PH 1330	PH 1315	PH 1311	MKF 1302	MPH 1308	MPH 1310	DC 1305	DC 1306	MPH 1257	MPH 1130	MPH 1300	MPH 1326
Smears Taken Tech/Time Start	1239 1240/50	1238 1240/50	1246 1247/50	1250 1251/50	1254 1255/50	MKF/DC 1234	MPH/DC 1235	MPH/DC 1245	MPH/DC 1240	MPH/DC 1237	MPH/DC 1234	MPH/DC 1234	MKF/DC 1213	MPH/DC 1244
Smears Taken Time End	1308	1330	1328	1300	1306	1259	1317	1305	1301	1302	1256	1224	1258	1320
Smears Read Tech/Time Start	1309	1332	1330	1315	1311	1302	1308	1311	1306	1307	1257	1153	1307	1326
Smears Read Time End	1405	1358	1402	1350	1347	1335	1350	1333	1337	1349	1321	1158	1350	1347
Animal Number														
1302	E	MD	D	P	E	D	D	P	E	M	D	D	E	D
1304	D	P	E	D	D	P	E	D	D	E	E	D	D	P
1306	E	D	D	P	E	M	D	P	E	M	D	P	E	D
1308	M	D	E	E	D	E	E	M	D	D	E	M	D	D
1310	M	D	P	E	D	P	P	E	D	D	P	E	D	D
1312	E	E	M	D	P	E	E	M	D	D	P	E	D	D
1313	D	E	D	D	P	E	M	D	P	E	M	D	P	E
1316	D	PD	E	E	M	D	D	E	E	M	D	D	E	D
1318	M	D	P	D	D	D	D	P	E	M	D	D	D	E
1321	D	PD	P	P	D	D	P	E	D	D	P	E	D	D
1325	E	E	D	D	P	E	M	D	E	E	D	D	P	E
1328	E	D	D	P	E	M	D	P	E	M	D	D	E	M

Reviewed By: Russell G. MazzaraDate: 5/28/01

① A as 5/9/01

② Procheck not performed prior to
rehydration of smears being taken;
Deviation worksheet. 5/12/01

RT 01.14.00 EC2-04a

A. H. H. 12/8/01

EXACT COPY

8/9/02

012433

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO	TYPE OF TEST: Estrous Cycle Evaluation	
DOSAGE: 0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	5/7/01	5/9/01	5/10/01	5/11/01	5/12/01	5/13/01	5/14/01	5/15/01	5/16/01	5/17/01	5/18/01	5/19/01	5/20/01	5/21/01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
1330	M	D	P	E	E D	D	P	E	D	D	P	E	M	D
1331	D	D	D	D	D P	D	D	E	E	E	M	D	D	P
1334	D	P	E	M	D	P	E	M	E	E	E D	D	D	P
1335	M D	D	P	E	D	D	P	E	M	D	P	E	M	D
1336	D	D	P	E	P	D	P	E	M	D	P	E	M	D
1338	D	E	M	D	D	P	E	M	D	P	E D	D	D	P
1340	E	D	D	D	P	D	D	D	D	D	D	P	D	D
1341	D	E	E	D	D	P	E	D	D	P	E D	D	D	P
1342	D	E	E	D	D	P	E	E	D	D	P	P	E	D
1344	D	P	E	D	D	D	E	E	M	D	D	E	M	D
1345	E	M	D	D	P	E	M	M	E	M	D	D	P	E
1346	D	D	P	E	D	D	E	E	E	P E	D	E	E	E
1348	P	E	D	D	P	E	M	D	P	E	M	D	P	E
1350	E	E	D	D	D	E	M	D	D	E	M	D	D	P
1353	D	D	D	D	P	E	D	D	P	E	M	D	D	P
1355	M	D	P	E	D	D	D	E	M	D	E E	E	M	D
1358	D	P	E	M	D	D	D	E	D	D	P	E	D	D
1359	D	D	D	E	E	M	D	D	E	E	E D	D	D	P

① E MPH 5-7-01

② A C 5-12-01

③ A DC 5-17-01

Reviewed By:

Russell G. Hoggan

Date:

5/28/01

RT 01.14.00 EC2-04b

EXACT COPY

8/9/02

012434

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO	TYPE OF TEST: Estrous Cycle Evaluation	
DOSAGE: 1 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	5/8/01	5/9/01	5/10/01	5/11/01	5-12-01	5-13-01	5-14-01	5-15-01	5-16-01	5-17-01	5-18-01	5-19-01	5-20-01	5-21-01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
1362	E	D	D	[Ⓟ] E	E	M	D	E	E	M	D	P	E	D
1363	D	D	P	[Ⓟ] E	D	D	P	E	M	M	D	E	D	D
1364	D	D	P	E	M	D	P	E	M	D	E	E	D	D
1367	E	D	D	P	E	M	D	P	E	D	D	P	E	D
1368	M	D	P	E	D	D	P	E	M	D	P	E	D	D
1371	D	D	D	E	M	D	D	P	E	M	D	P	E	D
1375	D	P	E	D	D	P	E	D	D	E	E	D	D	E
1376	E	D	D	D	P	E	M	D	P	E	E	D	D	P
1378	E	D	D	E	D	D	D	E	E	M	D	P	E	D
1379	E	D	D	P	E	D	D	P	E	D	D	P	E	D
1381	E	D	D	P	E	D	D	E	E	M	D	D	E	D
1382	D	D	E	E	D	D	P	E	M	M	D	E	M	D
1383	[Ⓟ] E	E	M	D	D	P	E	M	D	D	D	D	D	P
1384	D	[Ⓟ] E	E	D	D	E	E	D	D	E	E	D	D	P
1387	P	D	E	E	D	D	P	E	E	M	D	P	E	E
1389	D	D	D	D	D	P	P	M	D	P	E	D	D	E
1392	E	D	D	P	E	M	D	P	E	M	D	P	E	D
1393	E	D	D	P	E	M	D	D	E	E	E	D	D	P
1397	D	P	E	D	D	P	E	D	D	D	E	D	D	E

① MPH 5-8-01

② MPH 5/9/01

③ MPH 5/14/01

Reviewed By:

Russell A. Lazzara

Date:

5/28/01

RT 01.14.00 EC2-04b

EXACT COPY

9/11/02

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 1 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

[illegible]

Reviewed By:

Russell G. Luzzana

Date:

5/28/0

RT 01.14.00 EC2-04b

EXACT COPY

7 qtu lo2

012436

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO	TYPE OF TEST: Estrous Cycle Evaluation	
DOSAGE: 3 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	5/8/01	5/9/01	5/10/01	5/11/01	5/12/01	5/13/01	5/14/01	5/15/01	5/16/01	5/17/01	5/18/01	5/19/01	5/20/01	5/21/01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
1421	D	E	D	D	E	E	M	D	P	E	D	D	D	E
1424	M	D	P	E	M	M	D	E	E	D	D	D	E	E
1426	E	E	M	D	D	E	E	M	D	D	E	E	D	D
1428	D	^u RD	D	E	M	D	D	P	E	P	D	E	E	E
1430	D	P	E	D	D	P	E	M	D	E	E	M	D	P
1431	P	E	M	D	P	E	M	D	P	D	M	D	P	E
1433	D	D	P	E	M	E	D	E	M	D	P	E	D	D
1436	E	D	D	E	E	M	D	E	E	E	D	D	E	D
1437	E	D	D	P	E	D	D	P	E	D	D	D	P	E
1439	M	D	E	P	D	D	E	E	M	P	P	E	D	D
1442	E	D	D	D	D	P	E	M	D	E	E	E	D	D
1443	D	D	D	E	E	D	D	D	F	E	D	D	D	P
1446	D	D	D	D	D	P	E	D	P	P	E	D	D	P
1448	D	P	E	M	D	P	E	D	D	BP P	E	M	D	P
1450	D	D	D	E	D	D	D	E	M	ED D	D	E	M	D
1452	D	E	D	D	P	D	D	D	P	DE D	D	D	D	E
1455	E	D	D	P	E	D	D	E	E	ED D	D	D	E	D
1456	E	D	D	P	E	E	M	m	M	BM D	D	D	P	E
1458	D	D	E	E	D	E	D	E	M	D	D	F	E	M

① A DC 5/9/01

② A DC 5-17-01

Reviewed By:

Amel G. Hoggan

Date:

5/24/01

RT 01.14.00 EC2-04b

EXACT COPY

9/11/02

012437

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 3 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Cri:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	5/8/01	5/9/01	5/10/01	5/11/01	5/12/01	5/13/01	5/14/01	5/15/01	5/16/01	5/17/01	5/18/01	5/19/01	5/20/01	5/21/01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
1459	D	D	D	P	E	D	D	D	E	DM	D	D	E	M
1461	D	E	P	E	M	D	D	D	E	ED	M	P	E	E
1463	D	E	E	D	D	P	E	P	M	DM	E	M	D	E
1465	E	E	E	M	D	E	E	P	M	D	D	E	E	D
1468	E	D	D	P	E	M	D	E	E	DM	D	E	E	M
1469	D	P	E	E	D	D	P	D	D	PD	P	E	M	D
1472	E	E	D	D	D	P	E	E	M	P	E	D	D	D
1474	D	E	E	D	D	P	E	E	M	DP	E	M	D	P
1476	E	D	D	P	E	D	D	D	E	D	D	P	E	D
1477	E	D	D	P	E	D	D	D	E	D	D	P	E	D
1480	D	E	E	D	D	P	E	D	D	ED	D	D	E	D

①A 5-17-01

Reviewed By:

Russell A. Goyette

Date:

5/28/01

RT 01.14.00 EC2-04b

EXACT COPY

9/11/02

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 10 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	5/8/01	5/9/01	5/10/01	5/11/01	5/12/01	5/13/01	5/14/01	5/15/01	5/16/01	5/17/01	5/18/01	5/19/01	5/20/01	5/21/01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
1482	E	M	D	P	E	E	D	P	P	E	M	D	P	E
1483	D	E	E	D	D	P	E	M	D	D	P	E	M	D
1486	D	D	E	M	D	D	E	D	D	D	D	P	E	D
1488	D	D	D	D	P	E	M	E	E	E	D	D	D	E
1490	E	E	D	D	P	E	D	E	P	E	M	D	P	E
1491	D	P	E	D	D	P	E	E	D	P	E	D	D	P
1494	D	E	D	D	P	P	M	D	E	E	E	D	D	D
1496	D	P	E	D	D	P	E	D	D	P	E	D	D	P
1497	E	D	D	P	D	M	D	P	E	M	D	P	E	D
1500	D	E	E	D	D	P	E	D	D	P	E	E	D	D
1502	D	D	D	D	P	D	D	D	E	E	D	D	D	D
1505	D	D	P	E	D	D	D	E	M	D	D	E	D	D
1507	E	D	D	P	E	D	D	E	E	D	D	P	E	D
1508	E	M	D	P	E	M	D	P	E	M	D	D	E	D
1511	E	D	D	D	D	P	D	D	E	E	M	D	D	P
1513	D	P	E	D	D	P	E	D	D	P	E	D	D	P
1514	E	E	E	D	D	E	E	D	D	E	E	D	D	P
1516	E	D	D	P	E	D	D	P	E	D	D	D	E	D
1517	E	E	D	D	P	E	M	D	P	E	D	D	D	E

①② MPHS-8-01

Reviewed By:

Russell A. Hayman

Date:

5/28/01

RT 01.14.00 EC2-04b

EXACT COPY

A 911102

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 10 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Cri:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

[illegible]

Reviewed By:

Russell G. Hazen

Date:

5/28/01

RT 01.14.00 EC2-04b

①① 416.30.01

EXACT COPY
J 911102

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 30 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

DATE	5/8/01	5/9/01	5/10/01	5/11/01	5/12/01	5/13/01	5/14/01	5/15/01	5/16/01	5/17/01	5/18/01	5/19/01	5/20/01	5/21/01
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Animal Number														
1541	D	P	E	M	D	E	E	D	D	P	E	D	D	D
1544	E	M	D	P	E	D	D	E	E	M	D	E	E	M
1545	M	D	P	E	D	D	D	E	M	D	P	E	D	D
1546	E	D	D	E	E	D	D	E	E	D	D	E	E	D
1548	D	D	P	E	M	D	P	E	E	D	P	E	D	D
1550	P	E	M	D	P	E	M	D	P	E	M	D	E	E
1552	M	D	D	E	D	D	D	E	M	D	P	E	D	D
1555	E	D	D	P	E	D	D	P	E	D	D	E	E	D
1557	D	P	E	D	D	P	E	D	D	P	E	D	D	P ^{(a) 5/21/01}
1558	E	D	D	E	E	E	M	D	P	E	M	D	P	E
1560	P	E	D	D	P	E	M	D	D	E	M	D	D	E
1564	D	D	P	E	D	D	P	E	M	D	P	E	M	D
1565	D	E	E	D	P	E	E	D	D	E	D	M	D	P
1566	E	D	D	P	E	D	D	M	E	M	D	D	D	D
1568	D	D	P	E	M	D	P	E	M	D	P	E	E	D
1571	D	D	P	E	D	D	P	E	M	D	P	E	M	D
1573	P	E	D	D	D	D	P	D	D	P	E	D	D	P
1576	D	D	D	P	E	E	D	E	E	D	D	E	E	D
1578	E	D	D	P	E	E	D	D	E	D	D	E	E	M

00Tk5.18.01

Reviewed By:

Russell A. Haggard

Date:

5/28/01

RT 01.14.00 EC2-04b

EXACT COPY

9/11/02

Argus

PROTOCOL: 418-020	TEST ARTICLE/SUBSTANCE: APFO		TYPE OF TEST: Estrous Cycle Evaluation
DOSAGE: 30 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	SPECIES/STRAIN: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

[illegible]

Reviewed By:

Russell A. Gazzo

Date:

5/22/01

RT 01.14.00 EC2-04b

EXACT COPY

~~X~~ 9/11/02

Argus

PROTOCOL: 418-020	Test Article/Substance: APFO		Type of Test: Estrous Cycle Evaluation
DOSAGE: 0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	Species/Strain: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

Date	5/22/01	5-23-01	5-24-01	5-25-01	5-26-01	5/27/01	5/28/01
	1	2	3	4	5	6	7
Saline Pre-Check Tech/Time	ALP 1232	P 1232	P 1234	P 1101	JSW 1102	ABH 1104	DC 1105
Saline Post-Check Tech/Time	ALP 1319	P 1327	P 1328	P 1262	JSW 1139	P 1150	BM 1159
Smears Taken Tech/Time Start	ALP/JSW/ 1231	P/ABH/JSW/ 1246	P/ABH/JSW/ 1246	P/ABH/JSW/ 1114	OK/ABH/JSW/ 1113	OK/ABH/JSW/ 1106	ABH/JSW/ 1115
Smears Taken Time End	1312	1322	1320	1151	1141	1135	1150
Smears Read Tech/Time Start	ALP 1314	P 1328	P 1328	P 1202	JSW/TYM 1146	P 1150	BM 1159
Smears Read Time End	1407	1429	1417	1301	1216	1222	1226
ANIMAL NUMBER							
1302	D	OP	E	M	D	P	E
1304	E	OPM	D	P	E	D	D
1306	D	P	E	M	D	P	E
1308	E	M	M	D	E	M	D
1310	P	E	M	D	D	F	M
1312	D	P	E	M	D	P	P
1313	D	D	D	P	M	D	P
1316	D	P	E	M	D	D	E
1318	D	D	D	D	E	E	D
1321	P	E	M	D	D	E	M
1325	D	D	P	E	M	E	E
1328	D	P	E	M	D	E	E
1330	D	E	M	D	E	E	M

000-543-01

Reviewed By:

Russell A. Hagan

Date: 5/28/01

① Postcheck not performed at completion
of obtaining vaginal smears; deviation
written. AB 14/10/01

RT 01.14.00 EC1.04a

ABH 12/8/01

EXACT COPY

R 911102

Argus

PROTOCOL: 418-020	Test Article/Substance: APFO		Type of Test: Estrous Cycle Evaluation
DOSAGE: 0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	Species/Strain: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

Date	5-22-01	5-23-01	5-24-01	5-25-01	5-26-01	5-27-01	5-28-01
	1	2	3	4	5	6	7
ANIMAL NUMBER							
1331	E	M	D	D	E	E	P
1334	E	M	D	P	E	D	D
1335	P	E	M	D	P	E	E
1336	P	E	M	D	D	E	M
1338	E	M	D	P	E	M	D
1340	E	E	M	D	M	E	E
1341	D E ^{6 AM 5/24/01}	D	D	E	E	D	E
1342	D	P	E	E	D	D	P
1344	D E ^{6 AM 5/24/01}	E	M	D	D	P	E
1345	D	D	E	E	M	D	D
1346	E	E	E	E	M	P	E
1348	M	D	P	E	M	D	P
1350	E	D	D	P	E	M	M
1353	E	E	M	D	D	E	M
1355	D	E	D	D	E	E	E
1358	P	E	M	D	E	E	E
1359	E	E	M	D	D	E	E

Reviewed By: Russell A. HaggardDate: 5/28/01

RT 01.14.00 EC1-04b

EXACT COPY

87 9/11/02

012444

Argus

PROTOCOL: 418-020	Test Article/Substance: APFO		Type of Test: Estrous Cycle Evaluation
DOSAGE: 1.0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	Species/Strain: Rat/Cri:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

Date	5.22.01	5.23.01	5.24.01	5.25.01	5.26.01	5.27.01	5.28.01
	1	2	3	4	5	6	7
ANIMAL NUMBER							
1362	D	P	E	M	D	D	E
1363	D	E	M	D	E	E	D
1364	P	E	M	D	E	E	D
1367	D	P	E	M	D	P	E
1368	P	E	M	D	E	E	D
1371	D	P	E	M	D	D	E
1375	E	D	D	D	M	D	E
1376	E	E	M	D	P	E	E
1378	D	D	E	D	D	D	E
1379	D	P	E	M	D	D	E
1381	D	D	E	P M	D	D	E
1382	P	E	M	D	E	E	D
1383	D	D	D	D	E	P	E
1384	E	M	D	P	E	D	D
1387	M	D	P	E	M	D	E
1389	E	M	D	P	E	M	M
1392	D	P	E	M	E	E	E
1393	E	M	D	D	E	M	D
1397	E	M	D	P	E	M	D
1399	P	E	M	D	D	E	E
1401	E	M	D	P	E	M	M

04P/5.25.01

Reviewed By:

Russell A. Hoggans

Date:

5/28/01

RT 01.14.00 EC1-04b

EXACT COPY
9/11/02

Argus

EXACT COPY
JF 9111102

Argus

PROTOCOL: 418-020	Test Article/Substance: APFO		Type of Test: Estrous Cycle Evaluation
DOSAGE: 3.0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	Species/Strain: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

Date	5-22-01	5-23-01	5-24-01	5-25-01	5-26-01	5-27-01	5-28-01
	1	2	3	4	5	6	7
ANIMAL NUMBER							
1421	D	D	E	E	M	D	E
1424	D	D	D	E	M	D	P
1426	D	E	E	M	E	D	E
1428	D	D	D	P	E	D	E
1430	E	M	D	P	E	M	D
1431	D	D	P	E	M	D	P
1433	P	E	M	D	D	E	D
1436	D	E	E	M	D	D	E
1437	E	M	D	P	D	E	M
1439	P	E	M	D	P	E	M
1442	D	E	E	D	D	D	E
1443	E	M	D	E	E	D	D
1446	E	E	M	D	P	E	E
1448	D	M	D	P	E	M	D
1450	D	E	M	D	E	E	D
1452	D	M	D	P	M	D	E
1455	D	M	E	M	D	P	E
1456	D	D	P	E	E	M	E
1458	D	D	E	E	D	D	P
1459	D	D	E	E	D	D	D
1461	D	D	P	P	E	D	P

Reviewed By:

Russell A. Haggan

Date:

5/28/01

RT 01.14.00 EC1-04b

EXACT COPY

7/21/02

Argus

EXACT COPY
JF 9/11/02

012448

Argus

PROTOCOL: 418-020	Test Article/Substance: APFO		Type of Test: Estrous Cycle Evaluation
DOSAGE: 10.0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	Species/Strain: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

Date	5-22-01	5-23-01	5-24-01	5-25-01	5-26-01	5-27-01	5-28-01
	1	2	3	4	5	6	7
ANIMAL NUMBER							
1482	D	D	P	E	M	D	E
1483	P	E	M	D	E	E	D
1486	D	P	E	M	D	D	E
1488	D	D	P	E	D	D	E
1490	D	D	P	E	D	D	E
1491	E	M	D	P	E	M	D
1494	D	E	M	D	E	E	E
1496	E	M	D	P	E	M	M
1497	D	P	E	M	D	P	E
1500	P	E	M	D	E	E	E
1502	D	D	D	D	D	D	E
1505	D	E	M	D	D	E	M
1507	D	P	E	M	D	P	E
1508	D	P	E	M	D	P	E
1511	E	M	M	M	D	P	P
1513	P	D	D	P	M	D	D
1514	E	M	D	E	D	D	D
1516	D	P	E	M	D	P	E
1517	D	D	D	E	D	D	E
1519	D	P	E	M	D	D	E
1521	D	P	E	M	D	P	E

Reviewed By:

Russell G. Haggard

Date:

5/28/01

RT 01.14.00 EC1-04b

EXACT COPY

J 9/1/02

Argus

9/11/02

012450

Argus

PROTOCOL: 418-020	Test Article/Substance: APFO		Type of Test: Estrous Cycle Evaluation
DOSAGE: 30.0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	Species/Strain: Rat/Crt:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

Date	5-22-01	5-23-01	5-24-01	5-25-01	5-26-01	5-27-01	5-28-01
	1	2	3	4	5	6	7
ANIMAL NUMBER							
1541	E	M	D	D	E D	D	E
1544	D	D	E	M	D	D	E
1545	P	E	D	D	D	E	E
1546	D	D	E	M	D	P	E
1548	P	E	M	D	P	E	M
1550	D	D	P	E	D	D	E
1552	D	E	M	E	D	E	M
1555	D	D	E	M	D	P	E
1557	E	M	D	E	E	D	D
1558	D	D	D	E	D	D	E
1560	D	D	P	E	D	D	E
1564	P	E	M	D	P	E	E D
1565	E	M	D	E	E	M	D
1566	D	P	E	M	D	D	E
1568	P	E	M	D	P	E	M
1571	P	E	M	D	P	E	D
1573	E	D	E	D	E	D	D
1576	D	D	P	E	M	D	E
1578	D	D	E	M	D	P	E
1579	E	M	D	E	E	D	E
1583	D	P	E	M	D	D	E

Reviewed By:

Russell A. Haggard

Date:

5/28/01

RT 01.14.00 EC1-04b

EXACT COPY

8/9/02

Argus

PROTOCOL: 418-020	Test Article/Substance: APFO		Type of Test: Estrous Cycle Evaluation
DOSAGE: 30.0 MKD	GENERATION: F1	ROUTE: Oral (Gavage)	Species/Strain: Rat/Crl:CD® (SD) IGS BR VAF/Plus®

P = Proestrus

E = Estrus

M = Metestrus

D = Diestrus

[illegible]

Reviewed By: Russell A. Gonzales

Date: 5/28/01

RT 01.14.00 EC1-04b

EXACT COPY
9/11/02