030-08515

X

Hoffmann-La Roche

Hoffmann-La Roche Inc.
340 Kingsland Street
Nutley, New Jersey 07110-1199

Direct Dial

Log: Mar 6
Remitter
Check No.: 182895
Amount: $230
Fee Category: 3K
Type of Fee: Renewal
Date Check Rec'd.: 3/8/88
Date Completed: 3/8/88
By: S. Kimberley

February 19, 1988

RECEIVED
'88 MAR -7 A11:28
U.S. N.R.C.
LIC FEE MGMT. BRANCH

U.S. Nuclear Regulatory Commission
Materials Licensing Branch
931 Park Avenue
King of Prussia, PA 19406

Gentlemen:

Hoffmann-La Roche currently holds byproduct material licenses 29-00018-05E and 29-00018-06G which will expire on March 31, 1988. These licenses allow Roche to distribute byproduct material to persons exempt from licensing pursuant to 10 CFR 30.18, and to persons generally licensed pursuant to 10 CFR 31.11, respectively. Roche also possesses broadscope byproduct material license 29-00018-02 for research, development, manufacturing, packaging and distribution. This letter constitutes an application for renewal of license 29-00018-06G. It is our desire to allow license 29-00018-05E to expire since Roche does not plan to manufacture or distribute products containing exempt quantities of byproduct material.

Roche manufactures and distributes in-vitro diagnostic laboratory reagents at its facility located at 11 Franklin Avenue, Belleville, N.J. The reagents contain a small amount of radioactive material tagged to antigen or antibody molecules as part of diagnostic kits used by physicians, clinical laboratories, or hospitals. The current radionuclide used is Iodine-125, although any radionuclide listed in 10 CFR 31.11 may be used with the exception of Mock-Iodine-125.

Regarding the requirements of 10 CFR 32.71, Attachment A to this letter is an actual package insert that accompanies each unit of radioactive material. The insert contains instructions regarding precautions to be followed in handling, storing, and disposing of the byproduct material. Attachment B contains actual examples of labels that are affixed to vials containing byproduct material distributed to general licensees. I trust this information will be sufficient for renewal of license 29-00018-06G.

Enclosed is check number 182893 for $230.00 as payment of the renewal fee pursuant to 10 CFR 170.31(3)(I).

Should you require additional information to evaluate this application, please call me at (201) 235-3418.

Very truly yours,

Michael J. Drzyzga
Radiation Safety Officer

MJD/gc

Attachments A and B
enclosure

ATTACHMENT A

Hoffmann-LaRoche, Inc.
License Renewal Application
29-00018-06G

Imipramine
LSD
Lidocaine
MDMA
Melanin
Meperidine
Methadone
Methamphetamine
Methaqualone
Methyprylon
Morphine
Naltrexone
Naproxen
Niacinamide
Norethindrone
Oxazepam
Penicillin G
Pentobarbital
Phencyclidine
Phenobarbital
Phenothiazine
Phenylbutazone
Phenylpropanolamine
Procaine
Promethazine
Quinine
Secobarbital
Tetracycline
Tetrahydrozoline
11-nor-Δ^9-THC-9-carboxylic acid
Trifluoperazine
Zomepirac

BIBLIOGRAPHY:

1. *Urine Testing for Drugs of Abuse*, National Institute on Drug Abuse (NIDA), Research Monograph 73, 1986.
2. Yalow, R.S., Berson, S.A.: *Nature 184:* 1648-1649, November, 1959.
3. Yalow, R.S.: *Circ Res 32 (Suppl):* 116-128, May, 1973.
4. Spector, S., Flynn, E.J.: *Science 174:* 1036-1038, December, 1971.
5. Spiehler, V.R., Sedgwick, P.: Radioimmunoassay Screening and GC/MS Confirmation of Whole Blood Samples for Drugs of Abuse. *J. Anal. Tox.* 9: 63, 1985.
6. Valente, D., Cassini, M., Piglia Pochi, M. and Vansetti, G.: Hair as the Sample in Assessing Morphine and Cocaine Addiction. *Clin. Chem.* 27, 11: 1952, 1981.

For Technical Assistance call 1-(800) 526-1247

THIS PACKAGE INSERT ISSUED NOVEMBER, 1987.

Roche Diagnostic Systems, Inc.
a subsidiary of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110-1199

Printed in U.S.A.

I[redacted]43243 - (100 Tests)
I[redacted]43253 - (2500 Tests)

abuscreen Radioimmunoassay for Cocaine Metabolite

abuscreen®

Radioimmunoassay for Cocaine Metabolite

SUMMARY AND EXPLANATION OF TEST:

The Abuscreen® Radioimmunoassay for Cocaine Metabolite is a specific and sensitive *in vitro* test to detect the presence of benzoylecgonine (the primary urinary metabolite of cocaine). While the sensitivity of the test is 5 ng/mL, for the identification of positive samples a cut-off value of 300 ng benzoylecgonine/mL is supplied as the positive reference control. Lower cut-off values can be prepared from reagents supplied in this product. The assay is capable of determining the presence of benzoylecgonine in urine at nanogram levels.

A number of metabolites are found in urine following administration of cocaine. Since the number and proportion of these metabolites vary with each subject, the results are expressed in terms of equivalents of benzoylecgonine per mL. A rapid, simple procedure, the test can be adapted to automated processes and meets the requirements for large- or small-scale screening.

The Abuscreen Radioimmunoassay for Cocaine Metabolite provides only a preliminary analytical test result. A more specific alternate chemical method must be used in order to obtain a confirmed analytical result. Gas chromatography/mass spectrometry (GC/MS) is the preferred confirmatory method.[1] Clinical consideration and professional judgement should be applied to any drug of abuse test result, particularly when preliminary positive results are used.

PRINCIPLES OF PROCEDURE:

The Abuscreen Radioimmunoassay for Cocaine Metabolite is based upon the competitive binding to antibody of ^{125}I radiolabeled antigen and unlabeled antigen, in proportion to their concentrations in the reaction mixture.[2-4]

An unknown specimen is mixed in a test tube with fixed amounts of benzoylecgonine antibody and radiolabeled antigen. Antigen present in a patient sample competes with labeled antigen for the limited antibody present. After precipitation of the antigen-antibody complex with a second antibody reagent and centrifugation, the tubes are decanted, drained, blotted, and the pellets containing bound antigen are counted in a gamma scintillation counter. Sample CPM values equal to or less than the CPM value of the positive reference control are indicative of the presence of cocaine metabolites in the urine specimen. A reference control level of 300 ng benzoylecgonine/mL is supplied for use as a cut-off value for detection of abuse.

REAGENTS:

Each Roche Abuscreen Radioimmunoassay for Cocaine Metabolite 100-Test Kit contains:

1. Anti-Benzoylecgonine Serum Reagent (Goat):
   1 bottle anti-benzoylecgonine serum (goat) in phosphate buffered saline containing bovine serum albumin and FD&C blue #1 with 0.2% sodium azide as preservative.
2. ^{125}I-Benzoylecgonine Reagent:
   1 bottle ^{125}I-Benzoylecgonine derivative in phosphate buffered saline containing FD&C yellow #5 with 0.1% sodium azide as preservative.
3. Positive Reference Control (Benzoylecgonine):
   1 vial Positive Reference Control containing 300 ng benzoylecgonine/mL (as free base) in phosphate buffered saline containing urea, creatinine, and FD&C yellow #5 with 0.2% sodium azide as preservative.
4. Normal Reference Control (Benzoylecgonine):
   1 vial Normal Reference Control consisting of phosphate buffered saline containing urea, creatinine and FD&C yellow #5 with 0.2% sodium azide as preservative.
5. Second Antibody Reagent (Donkey):
   1 bottle anti-goat immunoglobulin serum (donkey) in phosphate buffered saline containing 4% polyethylene glycol, FD&C yellow #5, and FD&C blue #1 with 0.1% sodium azide as preservative.

Each Roche Abuscreen Radioimmunoassay for Cocaine Metabolite 2500-Test Kit contains in addition to the above:

6. Low Control (Benzoylecgonine):
   1 vial of Low Control containing 150 ng benzoylecgonine/mL (as free base) in phosphate buffered saline containing urea, creatinine and FD&C yellow #5 with 0.2% sodium azide as preservative.
7. High Control (Benzoylecgonine):
   1 vial of High Control containing 600 ng benzoylecgonine/mL (as free base) in phosphate buffered saline containing urea, creatinine and FD&C yellow #5 with 0.2% sodium azide as preservative.

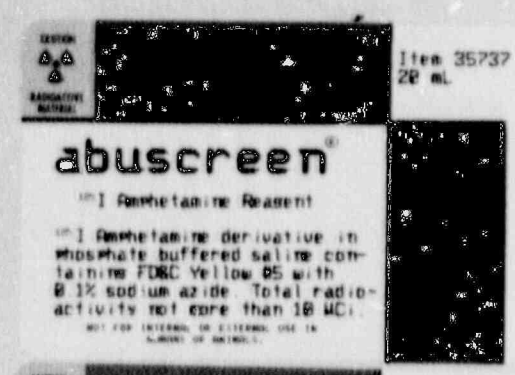
WARNINGS AND PRECAUTIONS:

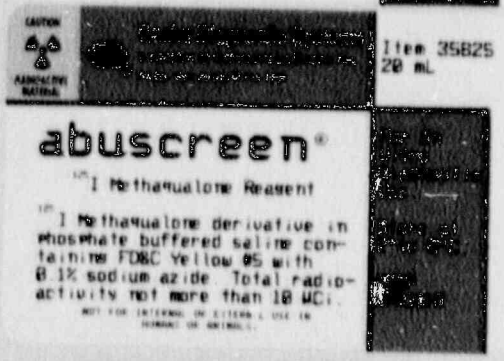
For *In Vitro* Diagnostic Use.

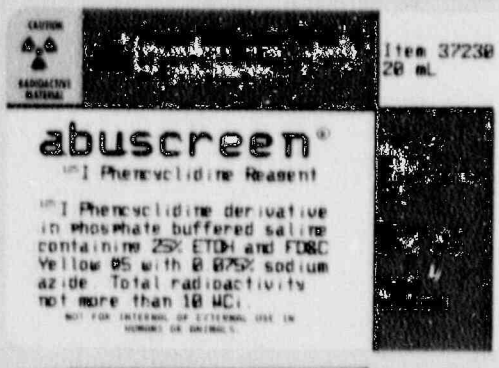
1. This radioactive material may be received, acquired, possessed and used only by physicians, clinical laboratories or hospitals, and only for *in vitro* clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use and transfer are subject to the regulations and a general license or specific license, of the

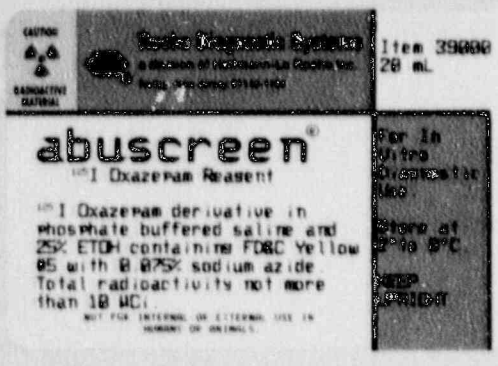
ATTACHMENT B

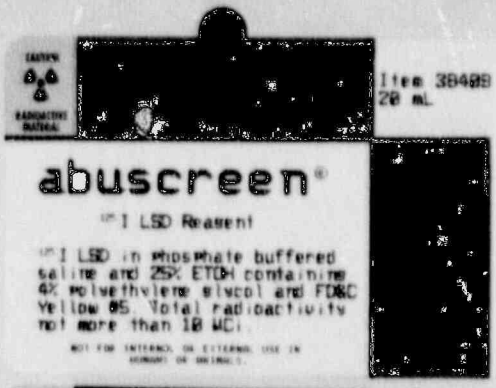
Hoffmann-LaRoche, Inc.
License Renewal Application
29-00018-06G

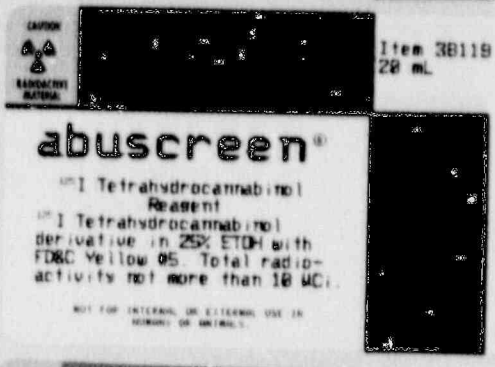


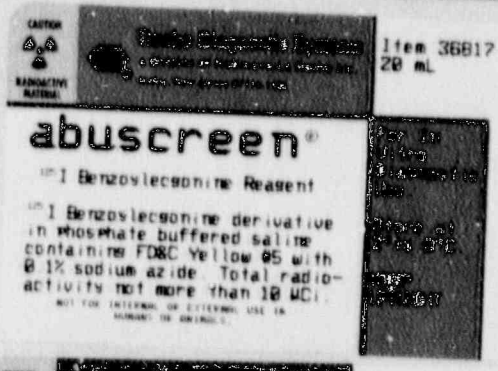


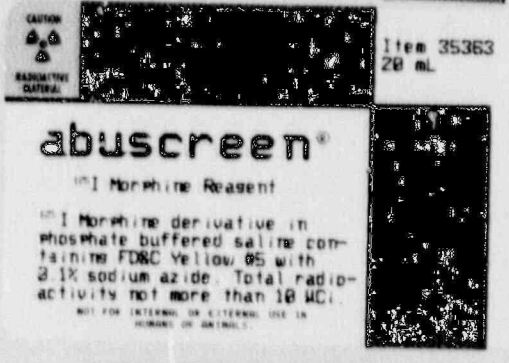


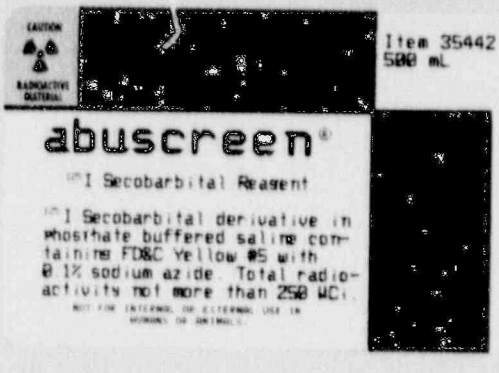












BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 03244
STATUS CODE: 2
FEE CATEGORY: 3K
EXP. DATE: 19880331
FEE COMMENTS: _____

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: HOFFMANN-LA ROCHE, INC.
RECEIVED DATE: 880226
DOCKET NO: 3008515
CONTROL NO.: 108471
LICENSE NO.: 29-00018-06G
ACTION TYPE: RENEWAL

2. FEE ATTACHED
AMOUNT: $230
CHECK NO.: 182893

3. COMMENTS

SIGNED _____
DATE 3/3/88

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED / 3/7)

1. FEE CATEGORY AND AMOUNT: 3K $230

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
AMENDMENT ____
RENEWAL ____
LICENSE ____

3. OTHER _____

SIGNED S. Kimberlen
DATE 3/7/88