# INSTRUCTIONS FOR USE

PLEASE READ ALL INFORMATION IN THE INSTRUCTIONS FOR USE BEFORE USING THE TEST!

REF See Box Label

## INTENDED USE

D-Pen<sup>™</sup> Mini THC Oral Fluid Test is a rapid oral fluid screening test. It's a lateral flow, one-step immunoassay for the qualitative detection of cannabinoids in human oral fluid at the cut-off level of 40 ng/mL.

This assay provides a qualitative, preliminary test result. A more specific analytical method must be used in order to obtain a confirmed result. Gas Chromatography/Mass spectrometry (GC/MS) or Liquid Chromatography/Tandem Mass Spectrometry (LC/MS-MS) are the preferred confirmatory methods. Professional judgment should be applied to any drug test result, particularly when preliminary positive results are indicated. It is intended for forensic use only.

### SUMMARY

Cannabinoids is a hallucinogenic agent derived from the flowering portion of the hemp plant. The active ingredients in Cannabinoids, THC & Cannabinol can be metabolized and excreted as 11-nor-\(\Delta\)-tetrahydro cannabinol-\(\Delta\)-carboxylic acid with a half-life of 24 hours. It can be detected for 1 to 5 days after use. Smoking is the primary method of use of Cannabinoids/cannabis. Higher doses used by abusers produce central nervous system effects, altered mood and sensory perceptions, loss of coordination, impaired short-term memory, anxiety, paranoia, depression, confusion, hallucinations and increased heart rate. A tolerance to the cardiac and psychotropic effects can occur, and withdrawal syndrome produces restlessness, insommia, anorexia and nausea.

#### PRINCIPLE OF THE PROCEDURE

D-Pen™ Mini THC Oral Fluid Test is a competitive immunoassay that is used to screen for the presence of cannabinoids in oral fluid. It is a chromatographic absorbent device in which cannabinoids in a sample competitively combined to a limited number of antibody-dye conjugate binding sites.

When the absorbent tip of the test device is immersed into the oral fluid sample, the sample is absorbed into the device by capillary action, mixes with the antibody-dye conjugate, and flows across the pre-coated membrane. When sample drug levels are zero or below the target cut off (the detection sensitivity of the test), antibody-dye conjugate binds to the drug-protein conjugate immobilized in the Test Region (T) of the device. This produces a colored Test line that, regardless of its intensity, indicates a negative result.

When sample drug levels are at or above the target cutoff, the free drug in the sample binds to the antibody-dye conjugate preventing the antibody-dye conjugate from binding to the drug-protein conjugate immobilized in the Test Region (T) of the device. This prevents the development of a distinct colored band in the test region, indicating a potentially positive result.

To serve as a procedure control, a colored line will appear at the Control Region (C), if the test has been performed properly.

- 1. For external use only. Do not swallow.
- 2. Discard after first use. The test cannot be used more than once.
- 3. Do not use test kit beyond expiration date.
- 4. Do not use the kit if the pouch is punctured or not well sealed.
- 5. Keep out of the reach of children.
- 6. Do not read result after 10 minutes.
- 7. The used test device should be discarded according to local regulations.

### STORAGE AND STABILITY

- 1. Store at 35°F 86°F (2°C 30°C) in the sealed pouch up to the expiration date.
- 2. Keep away from direct sunlight, moisture and heat.
- 3. DO NOT FREEZE.
- 4. Preferably open the pouch only shortly before the test.

## MATERIALS AND COMPONENTS

#### REAGENTS AND MATERIALS SUPPLIED

- D-Pen™ Mini THC Oral Fluid Test
- Instructions for use

#### MATERIALS REQUIRED BUT NOT PROVIDED

Timer or stopwatch

## SAMPLE COLLECTION AND TEST PROCEUDRE

Please read the instructions carefully before testing.

- 1. Allow the test device to equilibrate to room temperature (59°F 86°F / 15°C 30°C).
- Remove the test device from the foil pouch by tearing at the notch. Hold the grip and remove the cap to expose the absorbent tip.
- Place the absorbent tip horizontally into the mouth, then swab the inside of the mouth and tongue to collect oral fluid.
- 4. Take the absorbent tip out from the mouth when the purple color moves across the result window in the center of the test device.
- 5 Read results at 5 minutes. Do not read after 10 minutes.



#### IOTE:

\*When sampling, gently hold it in mouth and let saliva naturally adsorb on the absorbent tip.

Ver1.0

- \*Do not eat, drink, or smoke for at least 30 minutes prior to sample collection.
- \*Any saliva specimen is appropriate for testing but the saliva specimen collected in the morning, before mouth rinsed, eating or drinking, is recommended.

## INTERPRETATION OF TEST RESULTS

#### Preliminary Positive (+)

A color band is visible in the control region. No color band appears in the test region. It indicates the concentration of cannabinoids is equal to or higher than the detection limit.

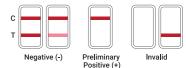
#### Monative (-)

A color band is visible in the control region and the test region. It indicates that the concentration of cannahinoids is zero or below the detection limit

#### Invalid

If a color band is not visible in the control region, the test is invalid. Another test should be run to re-evaluate the specimen. If test still fails, please contact the distributor or manufacturer with the lot number

NOTE: There is no meaning attributed to line color intensity or width.



## OUALITY CONTROL

Though there is an internal procedural control line in the test device of Control region, the use of external controls is strongly recommended as good laboratory testing practice to confirm the test procedure and to verify proper test performance. Positive and negative control should give the expected results. When testing the positive and negative control, the same assay procedure should be adopted.

## LIMITATIONS OF PROCEDURE

- 1. The test provides only a qualitative, preliminary analytical result. A secondary analytical method must be used to obtain a confirmed result. Gas chromatography/mass spectrometry (GC/MS) is preferred confirmatory methods.
- 2. A positive test result does not indicate the concentration of drug in the specimen or the route of administration.
- A negative result may not necessarily indicate a drug-free specimen. Drug may be present in the specimen below the cutoff level of the assay.

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## PERFORMANCE CHARACTERISTICS

#### A. Analytical Sensitivity

D-Pen™ Mini THC Oral Fluid Test has set the screen cut-off for positive specimens at 40 ng/mL for cannabinoids as a calibrator. The test device has been proved to detect above cut-off of cannabinoids in oral fluid at 5 minutes.

#### B. Analytical Specificity

The following table lists the concentration of compounds above which the D-Pen™ Mini THC Oral Fluid Test identified positive results at a read time of 5 minutes.

Compound	Concentration (ng/mL)	
Cotinine (THC)		
11-nor-Δ9 -THC-9-COOH	40	
11-nor-Δ8-THC-9-C00H	30	
11-hydroxy-Δ9 -THC	2,000	
Δ8-THC	7,500	
Δ9-THC	10,000	
Cannabinol	10,000	
Cannabidiol	100,000	

#### C. Interfering substances

A study was conducted to determine the cross-reactivity of the test with the following compounds. The following compounds show no cross-reactivity when tested with D-Pen™ Mini THC Oral Fluid Test, at a concentration up to 100 µg/ml

Aminopyrine	Lofexidine
Amoxici <b>ll</b> in	Loperamide
Ampici <b>ll</b> in	Maprotiline
Apomorphine	Meperidine
Aspartame	Meprobamate
Aspirin	Methadone
Atropine	Methoxyphenamine
Benadryl	Morphinie-3-b-d-glucuronide
Benzi <b>l</b> ic acid	N-Acetylprocainamide
Benzoic acid	Nalidixic acid
Benzoylecgonine	Naloxone
Bilirubin	Naltrexone
Cannabidiol	Naproxen
Captopril	Niacinamide
Chloralhydrate	Nifedipine
Chloramphenicol	Nitroglycerin

Chlorothiazide	Norcodeine
Chlorpromazine	Norethindrone
Chloroquine	Noscapine
Cholesterol	O-Hydroxyhippuric acid
Clarithromycin	Omeprazole
Clonidine	Oxalic acid
Codeine	Oxazepam
(-) Cotinine	Oxolinic acid
Cortisone	Oxymetazoline
Creatinine	Papaverine
Deoxycorticosterone	Penicillin V Potassium
Dextromethorphan	Penici <b>ll</b> in-G
Diazepam	Pentobarbital
Diclofenac	Perphenazine
Diflunisal	Phencyclidine
Digoxin	Phenelzine
Diphenhydramine	Phenytoin
D L-Tryptophan	Pholcodine
D,L-Isoproterenol	Prednisone
D,L-Octopamine	Procaine
DL-Propranolol	Propranolol HCI
DL-Tyrosine	Quinine
D-Norpropoxyphene	Ranitidine
D-Propoxyphene	Ranitidine HCI
D-Pseudoephedrine	Salicylic acid
Dopamine HCI	Secobarbital
Doxepine	Serotonin (5-Hydroxytyramine)
Doxylamine	Sulfamethazine
Ecgonine methyl ester	Sulindac
β-Estradiol	Tetrahydrocortisone3-(β-Dglucuronide
Erythromycin	Tetrahydrocortisone, 3-acetate
Estrogen	Tetrahydrozoline
Fenoprofen	Thiamine
Furosemide	Thioridazine
Gentisic acid	Triamterene
Hydralazine	Trifluoperazine
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Hydrochlorothiazide	Trimethoprim

3-Hydroxytyramine	Uric acid
Hydrocortisone	Venlafaxine HCI
Ibuprofen	Verapamil
Isoxsuprine	Sertraline Hydrochloride
Ketamine	Zomepirac
Ketoprofen	

## BIBLIOGRAPHY OF SUGGESTED READING

- 1. Moolchan, E., et al. "Saliva and Plasma Testing for Drugs of Abuse; Comparison of the Disposition and Pharmacological Effects of Cocaine", Addiction Research Center, IRP, NIDA, NIH, Baltimore, MD. As presented at the SOFT-TIAFT meeting October 1998.
- 2. Kim. I. et al. "Plasma and oral fluid pharmacokinetics and pharmacodynamics after oral codeine administration". Clin Chem. 2002 Sept.: 48 (9), pp 1486-96.
- 3. Schramm, W. et al. "Drugs of Abuse in Saliva: A Review." J Anal Tox, 1992 Jan-Feb: 16 (1), pp 1-9.
- 4. McCarron, MM, et al. "Detection of Phencyclidine Usage by Radioimmunoassay of Saliva," J Anal Tox. 1984 Sep-Oct.; 8 (5), pp 197-201

## ASSISTANCE

Call toll-free (888) 695-5248 (Monday - Friday 9:00 am - 5:00 pm, CST) or email to support@dochekusa.com.

# INDEX OF SYMBOL



for use







Store at 35°F - 86°F (2°C - 30°C)



Keep away from sunlight

Catalogue number



Use-by date Batch code



Do not reuse



Do not use if package is damaged

## Manufactured for:

### Dochek USA INC

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#### Made in China

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