

## DRG Morphine (Dipstick) (RAP-2644)

### INTENDED USE

The Morphine Rapid Test is a qualitative, competitive binding immunoassay for the rapid determination of morphine in human urine specimens. The presence of morphine in urine as low as 300 ng/ml can be detected in less than 5 minutes.

### SUMMARY

The morphine Rapid Test is an easy, fast, and visually read screening chromatographic immunoassay method. The test system employs specific monoclonal antibody to selectively identify morphine and its metabolites in urine with a high degree of sensitivity. It has been developed for the determination of heroin, morphine, and codeine in urine at the concentration of 300-ng/ml set by the National Institute on Drug Abuse.

### PRINCIPLE

The Morphine Rapid Test is a chromatographic immunoassay (CIA) for the detection of morphine and its metabolites in a specimen. The morphine and its metabolites in a specimen will compete with the morphine conjugate, which is immobilized on a porous membrane for binding of a specific monoclonal antibody-gold conjugate. Labeled specific antibody-gold conjugate mixes with urine specimen and binds to the free drug present forming an antibody-antigen complex. This complex will compete with the immobilized morphine conjugate in the test region which will prevent the formation of a pink band when the drug is above the detection level of 300 ng/ml. Therefore a positive specimen will not show a pink band on test region, while the presence of the pink band on the test region indicates a negative result.

### PRECAUTION

1. This test is for *in vitro* diagnostic use only.
2. Do not use after the expiration date.
3. Test device should remain sealed until ready for use.

### STORAGE

Store the test kit refrigerated or room temperature (2-25°C) in sealed pouch under dry condition. Do not freeze.

### SPECIMEN COLLECTION AND STORAGE

Collect a urine specimen in a clean, dry container, either plastic or glass, without any preservatives. Urine specimens may be refrigerated (2-8°C) and stored up to 3 days. Urine specimen exhibiting visible precipitates should be filtered, centrifuged or allowed to settle. Use only clear aliquots for testing.

### ASSAY PROCEDURE

1. Collect a small volume of urine for the test (one quarter of the cup's fill-volume is sufficient).
2. Bring up all reagents and specimens to room temperature. Do not open the pouch until ready to use.
3. Remove the dipstick strip by tearing open the pouch.
4. Carefully place the white end of the reaction strip into the urine sample. A 10-30 seconds dip into the urine is sufficient.
5. Remove end of test strip from urine sample and start the watch or timer.
6. Read the result within 5 minutes, no longer than 10 minutes.

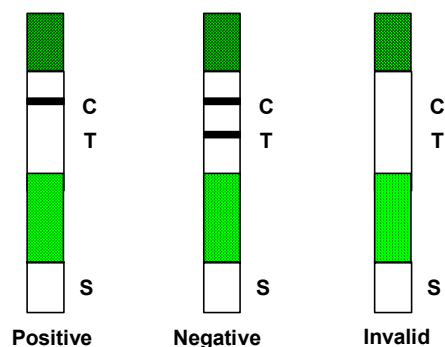
### Interpretation Of Result

**Positive:** Only one color band appears in the control region (C).

**Negative:** Two color bands appear, one in the control region (C) and another one in the test region (T).

**Invalid:** If no bands appear after 10 minutes, the result is invalid. The protocol may not have been followed correctly or the test may be deteriorated. The assay should be repeated using a new test. **Note:** Do not interpret result after 10 minutes.

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### LIMITATION

1. The test is designed for use with human urine only.
2. There is possibility that factors such as technical or procedural errors, as well as additional substance in the urine specimen that are not listed below, may interfere with the test and cause erroneous results.
3. The test detects only the presence of morphine in urine. It does not provide any indication of intoxication.
4. The test result read after 10 minutes may not be consistent with the original reading obtained within the 5 minutes test period.

### PERFORMANCE CHARACTERISTIC

#### SENSITIVITY

The morphine Rapid Test detects morphine, opiates and opiates in urine at an average of 300 ng/ml.

#### SPECIFICITY

Compounds not detected:

Acetaminophen	Hydrochlorothiazide	Phendimetrazine
Acetophenetidin	Indomethacin	Phenelzine
Acetylsalicylic Acid	Ketoprofen	d-propoxyphene
Amoxicillin	Labetalol	Proparacaine
Ampicillin	Lidocaine	Quinine
Apomorphine	Maprotiline	Salicylic Acid
Benzoic Acid	Meprobamate	Secofamethazine
Benzoylcegonine	Methadone	Sulfamethazine
Caffeine	Methaqualone	Sulindac
Cannabidiol	Methamphetamine	Temazepam
Cholesterol	Methylphenidate	Tetracycline
Diazepam	Niacinamide	Thiamterene
Digoxin	Noscapine	d,l-Thyroxine
Diphenhydramine	Oxalic Acid	Triamterene
Doxylamine	Oxazepam	Trimethoprim
Ecgonine Methyl Ester	Oxycodone	Trimipramine
Furosemide	Penicillin G	Tryptamine
Glutethimine	Pentazocaine	d,l-Tryptophan
5-Hydroxytryptamine	Penopropfen	Uric Acid
		Zomepirac

### REFERENCE

1. Cone, E.J.: J. Anal. Toxicol., 1993, 17:156-164
2. Department of Health and Human Services, Fed. Regist., 1988, 53:11970-11989
3. Walsh, T.D.: Pharm. J., 1983, 10:525-527