

## Wright's Dip Stat Kit Catalog Numbers 300 and 300K

### Intended Use

Wright's dip stat is intended for the differential staining of blood and bone marrow smears.

Traditional wright's stain is an alcoholic solution of the compound stain formed from the reaction of poly-chromed methylene blue and eosin Y. Giemsa stain is the compound stain formed from polychromed methylene blue and eosin B. Most commercial staining solutions of wright's stain also contain giemsa stain, glycerin and sometimes buffer salts. Polychromed methylene blue is methylene blue that also contains lower homologs. Originally it was prepared by oxidizing methylene blue with dichromate. Most modern preparation are prepared by mixing stains such as azure A and thionin with methylene blue.

Our wright's dip stat differs from the traditional wright's stain in that the eosin and methylene blue are in separate staining solutions. This allows greater control of the color contrast and also allows for formulating a more rapid aqueous based stain.

### Wright's Dip Stat Reagents Available

Item	Catalog #
Eosin stain	302
Methanol	107B
Methanol, tinted	300
Polychromed methylene blue	303
Reagent alcohol	374B
Water, deionized	9265B
Wright's Dip stat Kit, 2 oz.	300
Wright's Dip Stat Kit, 8 oz.	300K

Materials provided in the kit are:

1. Methanol (tinted)
2. Eosin stain
3. Polychromed methylene blue
4. Deionized water

The staining solutions for the 2 oz. kit, cat# 300, are packaged in ready to use styrene stain jars. All reagents are available in larger refill sizes

### Specimen Collection and Preparation for Analysis

Smears are made from capillary blood or freshly drawn venous blood without anticoagulant. Hemolysis will render

the sample unsatisfactory. Avoid excessive heat. Use clean, dry, sterile containers for collection.

### Procedure

1. Immerse the dry smear in the fixative, Wright's Dip Stat #1, for 30 to 60 seconds. The time is not critical and a longer time does no harm.
2. Transfer to the eosin stain, Wright's Dip Stat #2, for about 12 seconds.
3. Remove the stained smear and rinse with purified water.
4. Immerse the washed smear in polychromed methylene blue, Wright's Dip Stat #3, for approximately 20 seconds.
5. Rinse with purified water, air dry and examine under oil immersion.

Note: All times are approximate. The user will wish to adjust staining times as appropriate.

### Sources of Error

1. Smears should not be too thick.
2. All glassware must be scrupulously clean.
3. Smears should be prepared promptly after the specimen is obtained.
4. Smears must be promptly stained after preparation. Smears that are more than a few hours old will show a noticeable loss of leukocytes. Smears older than 24 hours are unusable.
5. Tap water is not suitable for rinsing. The chlorine will bleach the stain. Likewise, the pH of the rinse water will affect the color of the stain.
6. If the smears are not properly rinsed before transferring between the staining solutions, the eosin stain will react with the methylene blue and shorten the use life of the solution.
7. It is recommended that control slides be ran as part of quality control.

### Stability of Final Reaction

Stained smears that have been properly mounted are stable indefinitely.

