TNBSA reagent
for amine detection

Product Description

Name: **TNBSA 5% Solution**
2,4,6-Trinitrobenzene sulfonic acid 5% w:v in MeOH
Sym: 2,4,6-trinitrobenzenesulfonic acid (TNBSA), picrylsulfonic acid, trinitrophenylsulfonic acid, trinitrobenzene sulfonate

Molecular formula : $C_6H_3N_3O_9S$
CAS number: 2508-19-2 (& 5400-70-4; 85600-65-3)
MW: 293.17 g/mol
Solubility: essentially insoluble in water; soluble in methanol
density(TNBS): 0.955 g/cm$^3$

Storage: -20°C (ship RT) (M)
UN: 0386

TNBS reacts with primary amines molecules to from a highly chromogenic (orange) product, whose absorbance at 335 to 345nm can be measured with a plate reader or spectrophotometer.
TNBSA can be used for measuring amines, sulphydryls, hydrazides, and ε-amino groups of L-lysine.

**Directions for Use**

- Standard Protocol for measuring protein primary amines

1) Dilute supplied 5% TNBSA solution 500-fold in 0.1M sodium bicarbonate buffer (pH 8.5).
rem: do not prepare this working solution in advance. Use immediately.

2) Add 250µL diluted TNBSA solution to 500µL of protein solution. Mix well.
rem: sample should be at 20-200µg/ml (proteins) or 2-20µg/ml (aminoacids) in a compatible buffer (devoid of Tris or other amine). Proteins can be dissolved if lyophilized or dialyzed in 0.1M sodium bicarbonate buffer (pH 8.5).

3) Incubate at 37°C for 2 hours.

4) Add 250µL of 10% SDS and 125µL of 1N HCl to each sample to stop and stabilize reaction.

5) Measure absorbance of solution at 335nm. Determine concentration of primary amines by calculation from the extinction coefficient or by comparison to amino acid standards.

References:

Contact your local distributor
uptima@interchim.com
Related products:

**OPA** (Fluoraldehyde o-Phthalaldehyde), 02727A
(collodial formulation, rapid stain and non destain or water destain)

Ordering information

Further package sizes and pricing may be found at [http://www.interchim.com](http://www.interchim.com)

Any questions please ask: Uptima / Interchim; Hotline: +33(0)4 70 03 73 06

Disclaimer: Materials from Uptima are sold for research use only, and are not intended for food, drug, household, or cosmetic use. Uptima is not liable for any damage resulting from handling or contact with this product.