G-Biosciences ♦ 1-800-628-7730 ♦ 1-314-991-6034 ♦ technical@GBiosciences.com

A Geno Technology, Inc. (USA) brand name

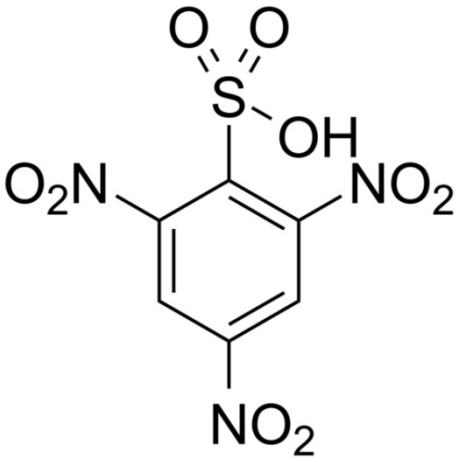
TNBS

2,4,6-Trinitrobenzene Sulfonic Acid
Picrylsulfonic Acid

(Cat. # BC86)

INTRODUCTION

TNBS (2,4,6-trinitrobenzene sulfonic acid) is a highly sensitive and rapid chemical used to quantitate the free amino groups. The reaction of TNBS with primary amines generates a highly chromogenic product that can be readily measured at 335nm. Supplied as a 1% solution in methanol.



ITEM(S) SUPPLIED

Cat. #	Description	Size
BC86	TNBS (2,4,6-trinitrobenzene sulfonic acid); 1% solution	10ml

STORAGE CONDITIONS

Upon receipt store at -20°C. Product is shipped at ambient temperature.

IMPORTANT

- Molecular weight: 293.17
- Formula: $C_6H_3N_3O_9S$
- CAS#: 2508-19-2

ADDITIONAL MATERIALS NEEDED

- Reaction Buffer: 0.1M Sodium bicarbonate, pH8.5
- 10% SDS in water
- 1N HCl

PROTOCOL

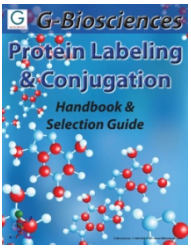
1. Prepare 20-200µg/ml protein solutions or 2-20µg/ml small molecules (amino acids) in Reaction Buffer. For proteins in solution, dialyze against Reaction Buffer. We recommend our Tube-O-DIALYZER™ product line (Cat. # 786-610 to 786-624) for dialysis.

   NOTE: *Avoid buffers containing free amines, including Tris and glycine.*

   NOTE: *For quantitation of amines, compare results to a standard curve generated with an amine-containing compound, such as an amino acid, prepared at various concentrations. Prepare or dialyze the standards in the reaction buffer. We recommend our Tube-O-DIALYZER™ product line (Cat. # 786-610 to 786-624) for dialysis.*
2. Immediately prior to assaying, prepare a Working Solution of 0.01% (w/v) TNBS in Reaction Buffer. Add 10µl 1% TNBS to 990µl Reaction Buffer for every ml required.
3. Add 250µl Working Solution of TNBS to 500µl each sample and standards and mix well.
4. Incubate at 37°C for 2 hours.
5. Add 250µl 10% SDS and 125µl 1N HCl to stop the reaction
6. Measure the absorbance at 335nm

RELATED PRODUCTS

Download our Protein Conjugation and Labeling Handbook.



http://info.gbiosciences.com/complete-protein-labeling-conjugation-handbook

For other related products, visit our website at www.GBiosciences.com or contact us.

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