

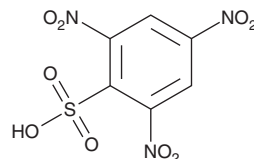
PRODUCT INFORMATION



2,4,6-Trinitrobenzenesulphonic Acid

Item No. 9004605

CAS Registry No.: 2508-19-2
Formal Name: 2,4,6-trinitro-benzenesulfonic acid
Synonyms: NSC 127994, Picrylsulfonic Acid, TNBS
MF: C₆H₃N₃O₉S
FW: 293.2
Supplied as: A 100 mg/ml solution 10% (w/v) in water
Storage: 4°C
Stability: ≥1 year



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

2,4,6-Trinitrobenzenesulfonic acid (TNBS) is a reagent and hapten.^{1,2} It reacts with free amino groups in peptides and proteins to produce a compound that absorbs at 335 nm and has been used in this way for the quantification of free amino groups during protein hydrolysis.¹ As a hapten, TNBS binds to high-molecular weight molecules, such as proteins, inducing them to become immunogenic.² In this way, it has commonly been used to induce colonic inflammation in laboratory animals as a model of inflammatory bowel disease (IBD), including Crohn's disease and ulcerative colitis.

References

1. Akhtar, M. and Ding, R. Covalently cross-linked proteins & polysaccharides: Formation, characterisation and potential applications. *Curr. Opin. Colloid Interface Sci.* **53:101450**, (2017).
2. Antoniou, E., Margonis, G.A., Angelou, A., *et al.* The TNBS-induced colitis animal model: An overview. *Ann. Med. Surg. (Lond)* **11**, 9-15 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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