**PRODUCT INFORMATION**

2-Nitro-5-thiocyanatobenzoic Acid
*Item No. 18236*

**CAS Registry No.:** 30211-77-9  
**Formal Name:** 2-nitro-5-thiocyanato-benzoic acid  
**Synonym:** NTCB  
**MF:** C₈H₄N₂O₄S  
**FW:** 224.2  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 280 nm

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**Laboratory Procedures**

For long term storage, we suggest that 2-nitro-5-thiocyanatobenzoic acid be stored as supplied at -20°C. It should be stable for at least two years.  

2-Nitro-5-thiocyanatobenzoic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-nitro-5-thiocyanatobenzoic acid in the solvent of choice. 2-Nitro-5-thiocyanatobenzoic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2-nitro-5-thiocyanatobenzoic acid in ethanol and DMF is approximately 25 mg/ml and approximately 11 mg/ml in DMSO.  

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 2-nitro-5-thiocyanatobenzoic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 2-nitro-5-thiocyanatobenzoic acid in PBS, pH 7.2, is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

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**Description**

2-Nitro-5-thiocyanatobenzoic acid is used to cyanylate proteins and to specifically cleave the amino-terminal peptide bond of cysteine residues.\(^1,2\)

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**References**


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**WARNING**  
**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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