

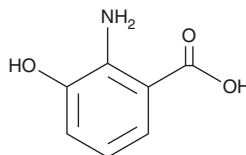
PRODUCT INFORMATION



3-hydroxy Anthranilic Acid

Item No. 20512

CAS Registry No.: 548-93-6
Formal Name: 2-amino-3-hydroxy-benzoic acid
Synonyms: 3-HAA, NSC 522891
MF: C₇H₇NO₃
FW: 153.1
Purity: ≥98%
UV/Vis.: λ_{max}: 223, 340 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

3-hydroxy Anthranilic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 3-hydroxy anthranilic acid in the solvent of choice, which should be purged with an inert gas. 3-hydroxy Anthranilic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 3-hydroxy anthranilic acid in these solvents is approximately 30 mg/ml.

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 3-hydroxy anthranilic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3-hydroxy anthranilic acid in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3-hydroxy Anthranilic acid is an intermediate in the oxidative metabolism of tryptophan in the kynurenine pathway that demonstrates immunoprotective effects.¹ It has been shown to inhibit nitric oxide synthase in macrophages and to stimulate TGF-β production, suppressing pro-inflammatory activity of Th1 cells.¹ It is also reported to act as a co-antioxidant for α-tocopherol, inhibiting human low density lipoprotein and plasma lipid peroxidation.²

References

1. Stone, T.W., Stoy, N., and Darlington, L.G. An expanding range of targets for kynurenine metabolites of tryptophan. *Trends Pharmacol. Sci.* **34**(2), 136-143 (2013).
2. Thomas, S.R., Wittig, P.K., and Stocker, R. 3-Hydroxyanthranilic acid is an efficient, cell-derived co-antioxidant for α-tocopherol, inhibiting human low density lipoprotein and plasma lipid peroxidation. *J. Biol. Chem.* **271**, 32714-32721 (1996).

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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