# **Product Information**



# O-Acetyl Salicylhydroxamic Acid

Item No. 70263

CAS Registry No.: 199854-00-7

Formal Name: N-(acetyloxy)-2-hydroxy benzamide

AcSHA, O-ASHA Synonyms:

MF: C<sub>0</sub>H<sub>0</sub>NO<sub>4</sub> FW: 195.2 **Purity:** 

Stability: ≥2 years at -20°C Supplied as: A crystalline solid

# **Laboratory Procedures**

For long term storage, we suggest that O-acetyl salicylhydroxyamic acid (O-ASHA) be stored as supplied at -20°C. It should be stable for at least two years.

O-ASHA is supplied as a crystalline solid. A stock solution may be made by dissolving the O-ASHA in an organic solvent purged with an inert gas. O-ASHA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of O-ASHA in these solvents is approximately 25, 50, and 30 mg/ml, respectively.

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 O-ASHA can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of O-ASHA in PBS (pH 7.2) is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

O-ASHA is an irreversible, non-selective inhibitor of COX-1 and COX-2. Aspirin is the best-studied example of an irreversible COX inhibitor, acting via the acetylation of the active site serine residue 529 in human COX-1. O-ASHA inhibits ovine COX-1 in a time-dependent, irreversible manner with a 50% B/B<sub>0</sub> value of approximately 4.5 mM.<sup>1</sup>

### Reference

1. Loll, P.J., Sharkey, C.T., O'Connor, S.J., et al. O-acetylsalicylhydroxamic acid, a novel acetylating inhibitor of prostaglandin H, synthase: structural and functional characterization of enzyme-inhibitor interactions. Mol. Pharmacol. **60**(**6**), 1407-1413 (2001).

### Related Products

For a list of related products please visit: www.caymanchem.com/catalog/70263

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

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