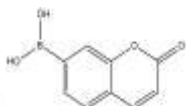


PRODUCT: Coumarin Boronic Acid**ALTERNATE NAME:** B-(2-oxo-2H-1-benzopyran-7-yl)-boronic acid; CBA**CATALOG #:** B1029-5, 25**AMOUNT:** 5 mg, 25 mg**STRUCTURE:****MOLECULAR FORMULA:** C₉H₇BO₄**MOLECULAR WEIGHT:** 190.0**CAS NUMBER:** 1357078-03-5**APPEARANCE:** Off-white solid**SOLUBILITY:** DMSO (~ 3 mg/ml)**PURITY:** ≥98%**STORAGE:** Store at -20°C. Protect from air and light

DESCRIPTION: Coumarin boronic acid (CBA) is a fluorescent probe useful for the detection of peroxynitrite, hypochlorous acid, and hydrogen peroxide. It reacts directly and rapidly with peroxynitrite at a much faster rate ($k = 1.1 \mu\text{M/s}$) than hydrogen peroxide ($k = 1.5 \text{ M/s}$) and moderately faster rate than hypochlorous acid. Peroxynitrite oxidizes CBA stoichiometrically at a 1:1 ratio into a fluorescent product that can be examined at an excitation of 332 nm and emission > 400 nm.

REFERENCES: Michalski, R., *et al.* (2014). *J. Biol. Chem.* **289**, 22536-22553.

RELATED PRODUCTS:Ebselen (**2169**)FeTPPS (**2065**)MnTBAP Chloride (**2058**)MnTMPyP Pentachloride (**2056**)

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

USAGE: **FOR RESEARCH CH USE ONLY! Not to be used in humans**