

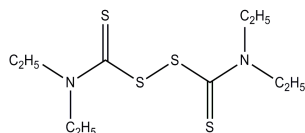
**PRODUCT: Disulfiram**

**ALTERNATE NAME:** 1,1',1'',1'''-[disulfanediy]bis(carbonothioyl)nitro]tetraethane; Tetraethylthiuram disulfide; *is*(diethylthiocarbamyoyl)disulfide

**CATALOG #:** 2308-50, 250

**AMOUNT:** 50 mg, 250 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>10</sub>H<sub>20</sub>N<sub>2</sub>S<sub>4</sub>

**MOLECULAR WEIGHT:** 296.54

**CAS NUMBER:** 97-77-8

**APPEARANCE:** Pale yellow solid

**SOLUBILITY:** DMSO (~ 6 mg/ml) or Ethanol (~ 30 mg/ml)

**PURITY:** ≥97% by titration

**STORAGE:** At -20° C. Protect from air and light

**DESCRIPTION:** An alcohol dehydrogenase inhibitor used for the treatment of chronic alcoholism. Suppresses the invasive ability of osteosarcoma cells via the inhibition of MMP-2 and MMP-9 expression. Also inhibits JMJD2A, a 2-oxoglutarate dependent N(epsilon)-methyl lysine histone demethylase, by disruption of its Zn-binding site.

**REFERENCES:** Sekimik, R., *et al.* (2009). *Chem. Commun.* **42**, 6376-6378.

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

**RELATED PRODUCTS:**

Caffeic acid (Cat. No. 2303-50, 250)

GSK-J4 hydrochloride (Cat. No. 2259-1, 5)

GSK-J1 sodium (Cat. No. 2260-1, 5)

IOX1 (Cat. No. 2266-5, 25)

β-Lapachone (Cat. No. 2262-5, 25)

2,4-PDCA (Cat. No. 2304-100, 500)

Tranylcypromine hemisulfate (Cat. No. 1816-25, 100)

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