

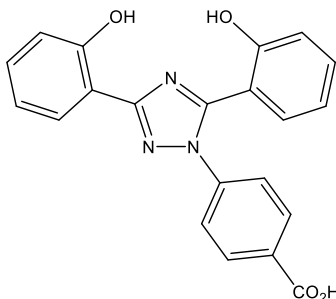
**Catalog # 10-4949**

**Deferasirox**

CAS# 201530-41-8

4-[3,5-bis(2-Hydroxyphenyl)-1,2,4-triazol-1-yl]benzoic acid; ICL670

Lot # FBS2197



Deferasirox is a clinically useful iron chelator used in long term care of  $\beta$ -thalassemia and other heavily transfused hematological patients.<sup>1,2</sup> It has been shown to potent inhibitor of JumonjiC Domain-Containing Histone Demethylases (IC<sub>50</sub>'s = KDM4A(JMJD2A) 4.76  $\mu$ M, KDM5A(JARID1A) 5.00  $\mu$ M, KDM6B(JMJD3) 3.95  $\mu$ M).<sup>3</sup> Deferasirox has also been investigated as a potential anticancer agent.<sup>4-6</sup>

- 1) Heinz *et al.* (1999), *4-[3,5-Bis(2-hydroxyphenyl)-1,2,4-triazol-1-yl]-benzoic acid: A Novel Efficient and Selective Iron(III) Complexing Agent*; *Ang. Chem. Int. Ed.*, **38** 2568
- 2) Palumbo *et al.* (2021), *From Biology to Clinical Practice: Iron Chelation Therapy With Deferasirox*; *Front. Oncol.*, **11** 752192
- 3) Roatsch *et al.* (2019), *The Clinically Used Iron Chelator Deferasirox Is an Inhibitor of Epigenetic JumonjiC Domain-Containing Histone Demethylases*; *ACS Chem. Biol.*, **14** 1737
- 4) Lui *et al.* (2015), *Targeting cancer by binding iron: Dissecting cellular signaling pathways*; *Oncotarget*, **6** 18748
- 5) Ibrahim and O'Sullivan (2020), *Iron chelators in cancer therapy*; *Biomaterials*, **33** 201
- 6) Szymonik *et al.* (2021), *The Impact of Iron Chelators on the Biology of Cancer Stem Cells*; *Int. J. Mol. Sci.*, **23** 89

**PHYSICAL DATA**

Molecular Weight:	373.36
Molecular Formula:	C <sub>21</sub> H <sub>15</sub> N <sub>3</sub> O <sub>4</sub>
Purity:	>98% by HPLC NMR: (Conforms)
Solubility:	Soluble in DMSO (10 mg/ml)
Physical Description:	Off-white to white solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to two years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**