

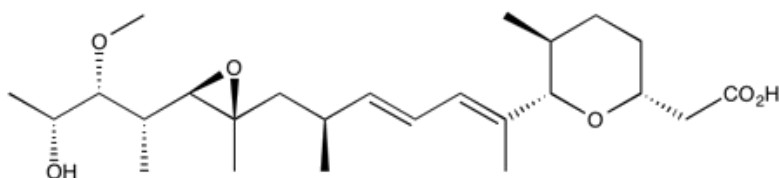
Catalog # 10-1614

Herboxidiene

CAS# 142861-00-5

GEX1A

Lot # X107309



A novel polyketide fermentation product produced by *Streptomyces chromofuscus*, originally discovered by screening for herbicidal activity. Potent and selective inhibitor of spliceosome subunit SF3b.² Specifically targets SAP155, a subunit of SF3b responsible for pre-mRNA splicing.³ Displays anti-angiogenic activity via down-regulation of VEGFR-2 and HIF-1 α .⁴ Spliceosome inhibitors have attracted enormous attention due to their potential use in cancer treatment.⁵

- 1) Miller-Wideman et al. (1992), *Herboxidiene, a new herbicidal substance from Streptomyces chromofuscus A7847. Taxonomy, fermentation, isolation, physio-chemical and biological properties*; J. Antibiot. (Tokyo), **45** 914
- 2) Gao et al. (2013), *Comparison of splicing factor 3b inhibitors in human cells*; Chembiochem, **14** 49
- 3) Hasegawa et al. (2011), *Identification of SAP155 as the target of GEX1A (Herboxidiene), an antitumor natural product*; ACS Chem. Biol., **6** 229
- 4) Jung et al. (2015), *Antiangiogenic activity of herboxidiene via downregulation of vascular endothelial growth factor receptor-2 and hypoxia-inducible factor-1 α* ; Arch. Pharm. Res., **38** 1728
- 5) Martinez-Montiel et al. (2016), *Microbial and Natural Metabolites That Inhibit Splicing: A Powerful Alternative for Cancer Treatment*; Biomed. Res. Int., **2016** 3681094

PHYSICAL DATA

Molecular Weight:	438.60
Molecular Formula:	C ₂₅ H ₄₂ O ₆
Purity:	97% by HPLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO or in Ethanol
Physical Description:	Thin film
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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