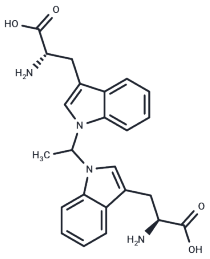
Data Sheet (Cat.No.T84937)

TargetMol

1,1'-Ethylidene-bis-(L-tryptophan)

Chemical Properties



CAS No. : 132685-02-0

Formula: C24H26N4O4

Molecular Weight: 434.49

Storage: Keep away from direct sunlight,Keep away from moisture,Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	1,1'-Ethylidene-bis-(L-tryptophan) is a potential impurity in L-tryptophan commercial products, promoting EoL-3 eosinophilic leukemia cell proliferation, enhancing eosinophil cationic protein release from human peripheral blood eosinophils, and boosting IL-5 production in human T cells. At 40 μg/kg, it triggers fascia thickening, mast cell infiltration, inflammation, and fibrosis in mouse superficial adipose and panniculus carnosus tissues, serving as an eosinophilia-myalgia syndrome research model. 1,1'-Ethylidene-bis-(L-tryptophan) is therefore used in immunotoxicology and eosinophil biology research systems to investigate cytokine-driven eosinophilic activation, mast cell infiltration pathways, and fibrosis-associated inflammatory remodeling in in vivo disease modeling contexts.
Targets(IC50)	IL Receptor

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3015 mL	11.5077 mL	23.0155 mL
5 mM	0.4603 mL	2.3015 mL	4.6031 mL
10 mM	0.2302 mL	1.1508 mL	2.3015 mL
50 mM	0.046 mL	0.2302 mL	0.4603 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Yamaoka KA, et al. 1,1'-Ethylidenebis(tryptophan) (Peak E) induces functional activation of human eosinophils and interleukin 5 production from T lymphocytes: association of eosinophilia-myalgia syndrome with a L-tryptophan contaminant. J Clin Immunol. 1994 Jan;14(1):50-60.
Trucksess MW. Separation and isolation of trace impurities in L-tryptophan by high-performance liquid chromatography. J Chromatogr. 1993 Feb 5;630(1-2):147-50.
Love LA, et al. Pathological and immunological effects of ingesting L-tryptophan and 1,1'-ethylidenebis (L-tryptophan) in Lewis rats. J Clin Invest. 1993 Mar;91(3):804-11.

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