

EEF1A1 (387-394) (Multiple species) (TFA)

Chemical Properties

CAS No. :

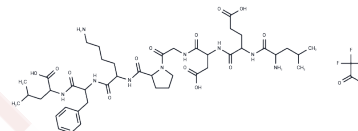
Formula: C45H68F3N9O15

Molecular Weight: 1032.07

Keep away from moisture

Storage: 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	eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) (387-394) [Multiple species] (TFA) is Elongation factor 1 subunit.eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) encodes an isoform of the alpha subunit of the elongation factor-1 complex, which is responsible for the enzymatic delivery of aminoacyl tRNAs to the ribosome. This isoform (alpha 1) is expressed in the brain, placenta, lung, liver, kidney, and pancreas, and the other isoform (alpha 2) is expressed in the brain, heart, and skeletal muscle. This isoform is identified as an autoantigen in 66% of patients with Felty syndrome. This gene has been found to have multiple copies on many chromosomes, some of which, if not all, represent different pseudogenes1.
Targets(IC50)	Others
In vitro	There are two forms of eEF1A in eukaryotes, eEF1A1 and eEF1A2, both of which possess the same role in protein synthesis2. eEF1A2 was reported to be exclusively expressed in the brain, heart, and skeletal muscle, whereas eEF1A1 is well known to be ubiquitously expressed3. Tetraploid cells produced by impaired chromosomal condensation are eliminated by a novel type of cell death different from caspase-dependent apoptosis. Cell death was associated with the downregulation of eukaryotic translation elongation factor-1 a 1 (eEF1A1/EF-1a) expression in conjunction with the accumulation of its mRNA in processing bodies (P bodies). Importantly, expression of exogenous eEF1A1 was shown to inhibit the caspase-independent cell death, and similar cell death was observed after inducing the expression of short hairpin RNA speci?c for eEF1A12.

Solubility Information

Solubility	DMSO: 10.41 mg/mL (10.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9689 mL	4.8446 mL	9.6893 mL
5 mM	0.1938 mL	0.9689 mL	1.9379 mL
10 mM	0.0969 mL	0.4845 mL	0.9689 mL
50 mM	0.0194 mL	0.0969 mL	0.1938 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

Kahns S, Lund A, Kristensen P, Knudsen CR, Clark BF, Cavallius J et al. The elongation factor 1 A-2 isoform from rabbit: cloning of the cDNA and characterization of the protein. *Nucleic Acids Res* 1998; 26: 1884-1890

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