Datasheet for ABIN2666946

FASL Protein (AA 134-281, His8)

Go to Product page

Overview

Quantity:	10 µg
Target:	FASL
Protein Characteristics:	His8, AA 134-281
Origin:	Human
Source:	CHO Cells
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Flow Cytometry (FACS)

Product Details

Purity:	> 90 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 0.01 ng per µg cytokine as determined by the LAL method.

Target Details

Target:	FASL
Alternative Name:	FASL (FASL Products)
Background:	FASL was initially cloned and purified from a cytotoxic T cell hybridoma, PC60-d10S. FASL is a type II transmembrane glycoprotein of approximately 40 kD and belongs to the TNF family of membrane-associated cytokines. A soluble fragment of FASL (sFASL, 26-29 kD) has been described using in vitro proteolytic assays, and MMP7 was proposed to participate in this

Target Details

	process. Nevertheless, TIMPs (tissue inhibitors of metalloproteinases) did not alter FASL shedding. FASL is proteolytically cleaved by ADAM10, and it is the major protease responsible for FASL cleavage in murine fibroblasts and human T cells. The cleavage site is between Ser126 and Leu127. This site is outside of the self assembly (SA) domain that allows sFASL to form trimers. It has been suggested that FASL performs its biological activity as a homotrimer. Shedding of FASL modulates FASL/FAS dependent apoptosis and affects activation-induced cell death (AICD) in a superantigen stimulation model. It has published that sFASL has proapoptotic and antiapoptotic properties, depending of cell type and cell microenvironment. sFASL can be detected in the serum of patients with dysregulated inflammatory diseases. Mutations in human FAS and FASL are associated to autoimmune lymphoproliferative syndrome (ALPS). In these patients, the homeostasis of T and B lymphocytes is disturbed, leading to hepatosplenomegaly and lymphadenopathy. Dysregulation of FAS/FASL has been connected to multiple diseases such as osteoarthritis, pulmonary fibrosis, diabetic polyneuropathy, acute coronary syndrome, bladder and gastric cancer among others.
Molecular Weight:	The 157 amino acid recombinant protein has a predicted molecular mass of approximately 18 kDa. The DTT-reduced and non-reduced protein migrate at approximately 29 to 30 kDa by SDS-PAGE. The N-terminal amino acid is Met.
Pathways:	Apoptosis, EGFR Signaling Pathway, Production of Molecular Mediator of Immune Response, Positive Regulation of Endopeptidase Activity

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Biological activity: ED50 = 1.5 - 6 ng/ml, corresponding to a specific activity of 1.6 - 6.6 x 105 units/mg, as determined by the dose dependent stimulation of Jurkat death cell induced by apoptosis.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Reconstitution:	For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10 µg/mL in sterile buffer (PBS, HPBS, DPBS, and EBSS) containing carrier protein such as 1 % BSA, 1 % HSA, or 10 % FBS. After dilution, the cytokine can be stored between 2 °C and 8 °C for one month or from -20 °C to -70 °C for up to 3 months.

Handling

Buffer:	0.22 µm filtered protein solution is in PBS.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Unopened vial can be stored between 2°C and 8°C for three months, at -20°C for six months, or at -70°C for one year.