Datasheet for ABIN2666915

CXCL14 Protein (AA 23-99)

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Overview

Quantity:	10 µg
Target:	CXCL14
Protein Characteristics:	AA 23-99
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Flow Cytometry (FACS)

Product Details

Purity:	> 98 % , 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:	CXCL14
Alternative Name:	CXCL14 (CXCL14 Products)
Background:	Mouse CXCL14 was identified from an EST database of a murine immature keratinocyte cDNA library. mRNA expression in mouse tissues showed high levels in brain, ovary, lung, and muscle. CXCL14 is well conserved between humans, birds, frogs and fish at the amino acid level, and human and mouse CXCL14 share 95 % identity. Original studies showed a decrease in the

Target Details

	expression of CXCL14 in head and neck squamous cell carcinoma (HNSCC) and cervical squamous cell carcinoma (SCCs) tumors, and the induction of expression of CXCL14 in human oral carcinoma prevented tumor growth of these cells in vivo. Therefore, it was suggested that CXCL14 possesses tumor suppressing function, and it was speculated that CXCL14 secreted by stromal cells chemoattracts iDCs (immature DCs) and NK cells that activate the immune response against tumor cells. Most recent data showed that epigenetic silencing of CXCL5, CXCL12, and CXCL14 occurs in 75 % of primary lung adenocarcinomas. Consequently, the low expression of CXCL14 in tumors might allow them to escape immune surveillance. Opposite of HNSCC and SCCs tumors, prostate, pancreatic, and colorectal cancers show high expression of CXCL14, inducing growth and invasiveness of pancreatic and breast cancer cells.
Molecular Weight:	The 77 amino acid recombinant protein has a predicted molecular mass of approximately 9.5 kDa. The DTT-reduced and non-reduced protein migrate at approximately 13 and 14 kDa by SDS-PAGE respectively. The N-terminal amino acid is Met.
Pathways:	Autophagy

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Biological activity: Bioactivity was measured by its property to chemoattract PGE2 activated THP-1 cells in a dose dependent manner.
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 or HSA. 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.
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.