

Recombinant Human Chemokine-like protein TFAFA-2 (Human TFAFA-2)

Product Information

Product Name	Cat#	Size
Recombinant Human Chemokine-like protein TFAFA-2 (Human TFAFA-2)	92539ES08	5 µg
	92539ES60	100 µg
	92539ES76	500 µg

Product Description

TFAFA2 also named FAM19A2, is a secreted, 11 kDa member of the FAM19/TFAFA family of chemokine-like proteins. It is synthesized as a 131 amino acid (aa) precursor that contains a 30 aa signal sequence and a 101 aa mature chain. Like other members of the FAM19/TFAFA family, with the exception of TFAFA5, mature TFAFA1 contains 10 regularly spaced cysteine residues that follow the pattern CX₇CCX₁₃CXCX₁₄CX₁₁CX₄CX₅CX₁₀C, where C represents a conserved cysteine residue and X represents any noncysteine amino acid. Human TFAFA2 is 97% aa identical to mouse TFAFA2. The biological functions of TFAFA family members remain to be determined, but there are a few tentative hypotheses. First, TFAFAs may modulate immune responses in the CNS by functioning as brain-specific chemokines, and may act with other chemokines to optimize the recruitment and activity of immune cells in the CNS. Second, TFAFAs may represent a novel class of neurokines that act as regulators of immune nervous cells. Finally, TFAFAs may control axonal sprouting following brain injury.

Product Properties

Synonyms	Chemokine-like protein TFAFA-2, FAM19A2, MGC42403, TFAFA2
Accession	Q8N3H0
GeneID	338811
Source	E.coli-derived human TFAFA-2 protein, Ala31-His131.
Molecular Weight	Approximately 11.2 kDa.
AA Sequence	ANHHKAHHVK TGTCEVVALH RCCNKNKIEE RSQTVKCSCF PGQVAGTTRA APSCVDASIV EQKWWCHMQP CLEGEECKVL PDRKGWSCSS GNKVKTTTRVT H
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	>95% by SDS-PAGE and HPLC analyses.
Biological Activity	The biological activity is determined by its ability to enhance neurite outgrowth of E16-E18 rat embryonic cortical neurons. recombinant human TFAFA-2, immobilized at 6-24 µg/mL on a 96 well plate, is able to significantly enhance neurite outgrowth. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 2 × PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!