

Active Recombinant Human TDGF1, Fc Chimera

Cat. No. TDGF1-496H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Teratocarcinoma-Derived Growth Factor 1 encoding the signal peptide and extracellular domain of human Cripto-1 (aa 1-169) was fused to the Fc region of human IgG1 (aa 90-330). The chimeric protein was expressed in modified <i>human 293 cells</i> .
Species	Human
Source	HEK293
Description	Cripto-1 (CR-1), also known as teratocarcinoma-derived growth factor-1 (TDGF-1), is a small glycoprotein that contains a single divergent EGF-like motif as well as a novel cysteine-rich domain termed the Cripto motif. It is the founding member of the EGF-CFC gene family, which is conserved among vertebrates, with homologs in chick, frogs, and zebrafish.
Amino Acid Sequence	LGHQEFARPSRGYLAFRDDSIWPQEPAIRPRSSQRVPPMGIQHSKELNRTCCLNG GTCM LGSFCACPPSFYGRNCEHDVRKENCGSVPHDTWLPPKCSLCKCWHGQLR CFPQAFLPG CDGLVMDEHLVASRTPELPPSGSSNTKVDKKVEPKSCDKTHTCPPC PAPELLGGPSVFLFP PKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVH NAKTKPREEQYNSTYRVVSVL TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG QPREPQVYTLPPSRDELTKNQVSLTCL VKGFYPSDIAVEWESNGQPENNYKTTTPV LDSDGSFFLYSKLTVDKSRWQQGNVFCSSVMH EALHNHYTQKSLSLSPGK.
Molecular Mass	Under reducing conditions Cripto-1 – Fc Chimera migrates as a broad band between

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	45 and 55 kDa on SDS-PAGE due to post-translational modifications, in particular glycosylation. This compares with unmodified Cripto-1 - Fc Chimera that has a predicted monomeric molecular mass of 42.8 kDa.
pI	Cripto-1 – Fc Chimera separates into a number of glycoforms with an observed pI between 6.5 and 10 on 2D PAGE due to post-translational modifications, in particular glycosylation. This compares with the unmodified Cripto-1 - Fc Chimera that has a predicted pI of 8.2.
% Carbohydrate	Purified Cripto-1 – Fc Chimera consists of 5-30% carbohydrate by weight.
Glycosylation	Cripto-1 – Fc Chimera contains N-linked and O-linked oligosaccharides.
Purity	>95%, as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.
Formulation	When reconstituted in 0.5 ml sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.
Storage	Lyophilized products should be stored at 2 to 8°C. Following reconstitution short-term storage at 4°C is recommended, with longer-term storage in aliquots at -18 to -20°C. Repeated freeze thawing is not recommended.
Activity	200 ng/ml Cripto-1 – Fc Chimera induces ERK1 and ERK2 phosphorylation in human umbilical vein endothelial (HUVEC) cells

GENE INFORMATION

Gene Name [TDGF1 teratocarcinoma-derived growth factor 1 \[Homo sapiens \]](#)

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Synonyms	TDGF1; teratocarcinoma-derived growth factor 1; CR; CRGF; CRIPTO; Cripto-1; Epidermal growth factor-like crypto protein CR1; Cripto-1 growth factor
Gene ID	6997
mRNA Refseq	NM_003212
Protein Refseq	NP_003203
UniProt ID	P13385
Chromosome Location	3p21.31
MIM	187395
Function	growth factor activity

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