

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived human IGF-I R/IGF1R protein		
	Human IGF1R (Glu31-His935) Accession # P08069.1	IEGRMD	Human IgG ₁ (Pro100-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Glu31 (alpha subunit), Asp741 (beta subunit)		
Structure / Form	Disulfide linked homodimer		
Predicted Molecular Mass	130 kDa (single chain), 80 kDa (alpha subunit) and 49 kDa (beta subunit)		

SPECIFICATIONS

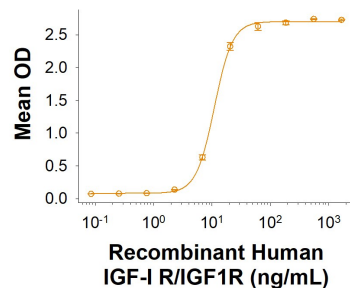
SDS-PAGE	160-180 kDa, 110-125 kDa and 70-80 kDa, under reducing conditions
Activity	Measured by its binding ability in a functional ELISA. Recombinant Human IGF-I R/IGF1R Fc Chimera (Catalog # 11655-GR binds to Recombinant Human IGF-I/IGF-1 (Catalog # 291-G1) with an ED ₅₀ of 3.00-45.0 ng/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/mL in water.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

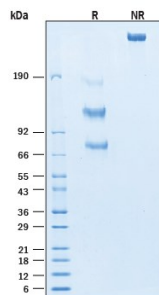
DATA

Binding Activity



Recombinant Human IGF-I R/IGF1R Fc Chimera Protein Binding Activity. In a functional ELISA, Recombinant Human IGF-I R/IGF1R Fc Chimera Protein (Catalog # 11655-GR) binds to Recombinant Human IGF-I/IGF-1 (Catalog # 291-G1) with an ED₅₀ of 3.00-45.0 ng/mL.

SDS-PAGE



Recombinant Human IGF-I R/IGF1R Fc Chimera Protein SDS-PAGE. 2 µg/lane of (Catalog # 11655-GR) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 160-180 kDa, 110-125 kDa and 70-80 kDa, under reducing conditions.

BACKGROUND

IGF-I receptor is a disulfide-linked heterotetrameric transmembrane protein consisting of two α and two β subunits. Both the α and β subunits are encoded within a single receptor precursor cDNA. The proreceptor polypeptide is proteolytically cleaved and disulfide-linked to yield the mature heterotetrameric receptor. The α subunit of IGF-I receptor is extracellular while the β subunit has an extracellular domain, a transmembrane domain and a cytoplasmic tyrosine kinase domain. The IGF-I receptor is highly expressed in all cell types and tissues. Essentially all of the biological activities of IGF-I and II have been shown to be mediated via IGF-I R.

References:

1. Rechler, M.M. and S.P. Nissley (1990) in *Insulin-Like Growth Factors*. Sporn, M.B. and A.B. Roberts (eds): *Peptide Growth Factors and Their Receptors I*, New York: Springer-Verlag, p. 263.