

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human IGF-I R in sandwich ELISAs and Western blots. Detects mouse IGF-I R in Immunohistochemistry. In sandwich immunoassays, less than 0.15% cross-reactivity or interference was observed with recombinant human (rh) IGF-I, rhIGF-II, rhIL-3 R α , rhIL-9 R, and rhTGF- β RII.
Source	Monoclonal Mouse IgG ₁ Clone # 33255
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IGF-I R Glu31-Asn932 Accession # P08069
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

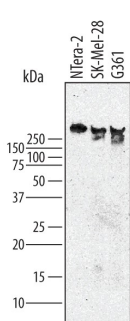
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	See Below
Immunohistochemistry	5-25 μ g/mL	See Below
Human IGF-I R Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Human/Mouse IGF-I R Antibody (Catalog # MAB391)
ELISA Detection	0.1-0.4 μ g/mL	Human IGF-I R Biotinylated Antibody (Catalog # BAF391)
Standard		Recombinant Human IGF-I R (Catalog # 391-GR)
Neutralization	Measured by its ability to neutralize IGF-I-induced proliferation in the MCF-7 human breast cancer cell line. Karey, K.P. <i>et al.</i> (1988) Cancer Research 48 :4083. At 11 μ g/mL, this antibody will neutralize approximately 50-75% of the bioactivity due to 6 ng/mL Recombinant Human IGF-I.	

DATA

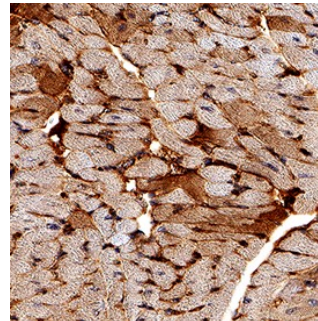
Western Blot



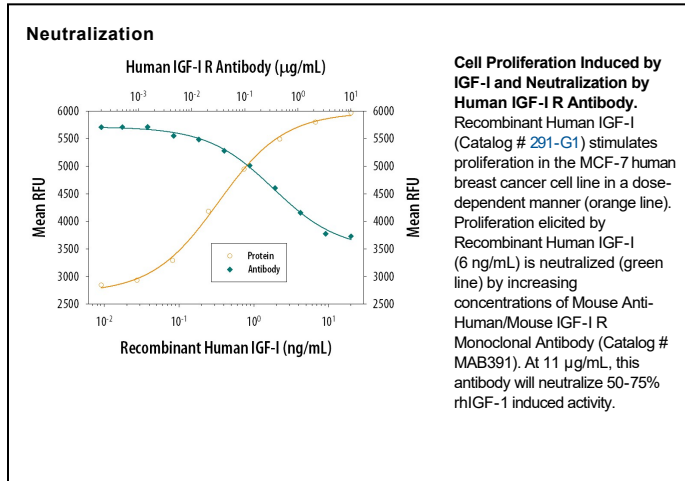
Detection of Human IGF-I R by Western Blot.

Western blot shows lysates of Ntera-2 human testicular embryonic carcinoma cell line, SK-Mel-28 human malignant melanoma cell line, and G361 human melanoma cell line. PVDF membrane was probed with 1 μ g/mL of Mouse Anti-Human/Mouse IGF-I R Monoclonal Antibody (Catalog # [MAB391](#)) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # [HAF007](#)). A specific band was detected for IGF-I R at approximately 275 kDa (as indicated). This experiment was conducted under non-reducing conditions and using [Immunoblot Buffer Group 2](#).

Immunohistochemistry



IGF-I R in Mouse Heart. IGF-I R was detected in perfusion fixed paraffin-embedded sections of mouse heart using Mouse Anti-Human/Mouse IGF-I R Monoclonal Antibody (Catalog # [MAB391](#)) at 15 μ g/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # [VC001](#)). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane and cytoplasm. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).



PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Insulin-like growth factor I receptor (IGF-I R) 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 R is extracellular while the β subunit has an extracellular domain, a transmembrane domain and a cytoplasmic tyrosine kinase domain. IGF-I R 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.