

## DESCRIPTION

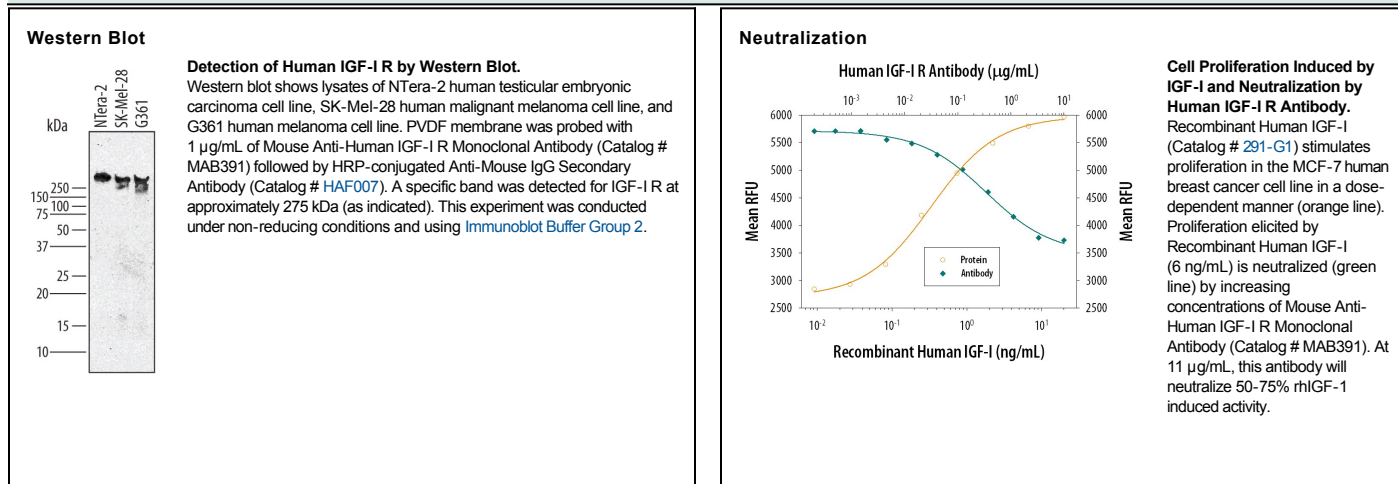
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IGF-I R in sandwich ELISAs and Western blots. In sandwich ELISAs, less than 0.15% cross-reactivity or interference was observed with recombinant human (rh) IGF-I, rhIGF-II, rhIL-3 R $\alpha$ , rhIL-9 R, and rhTGF- $\beta$ RII.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 33255
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IGF-I R Glu31-Asn932 Accession # P08069
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ 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
<b>Western Blot</b>	1 $\mu$ g/mL	See Below
<b>Human IGF-I R Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 $\mu$ g/mL	Human IGF-I R Antibody (Catalog # MAB391)
<b>ELISA Detection</b>	0.1-0.4 $\mu$ g/mL	Human IGF-I R Biotinylated Antibody (Catalog # BAF391)
<b>Standard</b>		Recombinant Human IGF-I R (Catalog # 391-GR)
<b>Neutralization</b>	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) <i>Cancer Research</i> 48:4083. At 11 $\mu$ g/mL, this antibody will neutralize approximately 50-75% of the bioactivity due to 6 ng/mL Recombinant Human IGF-I.	

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Insulin-like growth factor I receptor (IGF-I R) is a disulfide-linked heterotetrameric transmembrane protein consisting of two  $\alpha$  and two  $\beta$  subunits. Both the  $\alpha$  and  $\beta$  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  $\alpha$  subunit of IGF-I R is extracellular while the  $\beta$  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.