

**Anti-IGF-1 Reference Antibody (xentuzumab)  
Recombinant Antibody  
Catalog # APR10184****Specification**

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**Anti-IGF-1 Reference Antibody (xentuzumab) - Product Information**

Application	FC, Kinetics, Animal Model
Primary Accession	<a href="#">P05019</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	143.7 KDa

**Anti-IGF-1 Reference Antibody (xentuzumab) - Additional Information****Target/Specificity**  
IGF-1

**Endotoxin**  
< 0.001EU/ µg,determined by LAL method.

**Conjugation**  
Unconjugated

**Expression system**  
CHO Cell

**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

**Anti-IGF-1 Reference Antibody (xentuzumab) - Protein Information**

**Name** IGF1 ([HGNC:5464](#))

**Function**  
The insulin-like growth factors, isolated from plasma, are structurally and functionally related to insulin but have a much higher growth-promoting activity. May be a physiological regulator of [1-14C]- 2-deoxy-D-glucose (2DG) transport and glycogen synthesis in osteoblasts. Stimulates glucose transport in bone-derived osteoblastic (PyMS) cells and is effective at much lower concentrations than insulin, not only regarding glycogen and DNA synthesis but also with regard to enhancing glucose uptake. May play a role in synapse maturation (PubMed:<a href="http://www.uniprot.org/citations/21076856" target="\_blank">21076856</a>, PubMed:<a href="http://www.uniprot.org/citations/24132240" target="\_blank">24132240</a>). Ca(2+)-dependent exocytosis of IGF1 is required for sensory perception of smell in the olfactory bulb (By similarity). Acts as a ligand for IGF1R. Binds to the alpha subunit of IGF1R, leading to the activation of the intrinsic tyrosine kinase activity which autophosphorylates tyrosine residues in the beta subunit thus initiating a cascade of down-stream signaling events leading to activation of

the PI3K-AKT/PKB and the Ras-MAPK pathways. Binds to integrins ITGAV:ITGB3 and ITGA6:ITGB4. Its binding to integrins and subsequent ternary complex formation with integrins and IGFR1 are essential for IGF1 signaling. Induces the phosphorylation and activation of IGFR1, MAPK3/ERK1, MAPK1/ERK2 and AKT1 (PubMed:<a href="http://www.uniprot.org/citations/19578119" target="\_blank">19578119</a>, PubMed:<a href="http://www.uniprot.org/citations/22351760" target="\_blank">22351760</a>, PubMed:<a href="http://www.uniprot.org/citations/23243309" target="\_blank">23243309</a>, PubMed:<a href="http://www.uniprot.org/citations/23696648" target="\_blank">23696648</a>). As part of the MAPK/ERK signaling pathway, acts as a negative regulator of apoptosis in cardiomyocytes via promotion of STUB1/CHIP-mediated ubiquitination and degradation of ICER-type isoforms of CREM (By similarity).

#### Cellular Location

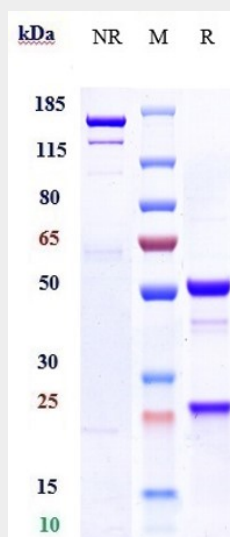
Secreted {ECO:0000250|UniProtKB:P05017}.

### Anti-IGF-1 Reference Antibody (xentuzumab) - Protocols

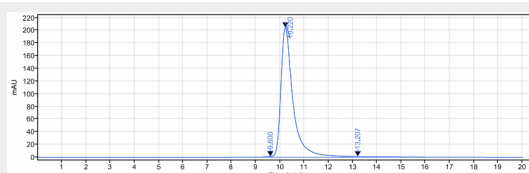
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

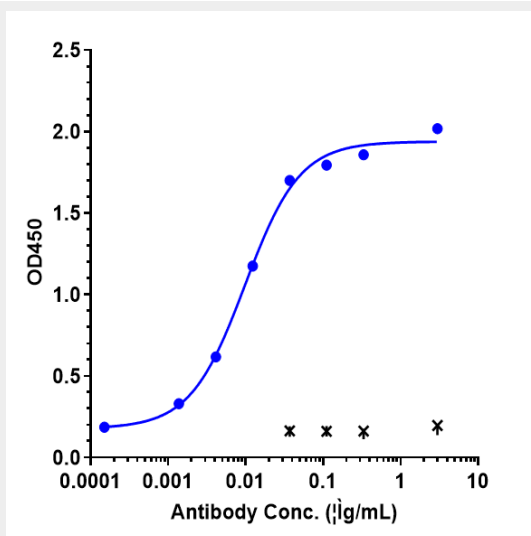
### Anti-IGF-1 Reference Antibody (xentuzumab) - Images



Anti-IGF-1 Reference Antibody (xentuzumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95.3%



The purity of Anti-IGF-1 Reference Antibody (xentuzumab) is more than 98.72% ,determined by SEC-HPLC.



Immobilized human IGF I Protein, His Tag at 2 µg/mL can bind Anti-IGF-1 Reference Antibody (xentuzumab)  $EC_{50}=0.009806 \mu\text{g/mL}$