10320 Camino Santa Fe, Suite G
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IGF-I Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10841

Specification

IGF-I Antibody - Product Information

Application	**WB, E**
Primary Accession	P05017
Other Accession	NP_001104744
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**17093**

IGF-I Antibody - Additional Information

Gene ID 16000

Application & Usage	**Western blot analysis (0.5-4 µg/ml). Recombinant human IGF-I. However, the optimal conditions should be determined individually.**

Other Names
IGF1, IGF-1, IGF 1, Insulin like growth factor-1, Insulin like growth factor 1

Target/Specificity
IGF-I

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.5 mg/ml) affinity purified rabbit anti-murine IGF-I polyclonal antibody in phosphate (PBS, pH 7.2) containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
IGF-I Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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IGF-I Antibody - Protein Information

Name Igf1

Synonyms Igf-1

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 (By similarity). Ca(2+)-dependent exocytosis of IGF1 is required for sensory perception of smell in the olfactory bulb (PubMed:21496647). 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 (By similarity). 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.

IGF-I Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IGF-I Antibody - Images

IGF-I Antibody - Background

IGF-I (Insulin-like Growth Factor-I) is a polypeptide growth factor that stimulates the proliferation of a wide range of cell types including muscle, bone, and cartilage tissue. Human IGF-I is a 7.6 kDa protein containing 70 amino acid residues.