

IGF-I Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10840**Specification**

IGF-I Antibody - Product Information

| | |
|-------------------|------------------------------|
| Application | WB, E |
| Primary Accession | P05019 |
| Other Accession | NP_001104754 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 21841 |

IGF-I Antibody - Additional Information**Gene ID** 3479**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-human IGF-I polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol 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.

IGF-I Antibody - Protein Information

Name IGF1

Synonyms IBP1

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:21076856, PubMed:24132240). 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:19578119, PubMed:22351760, PubMed:23696648, PubMed:23243309). 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}.

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 Cytometry](#)
- [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.