

Anti-IGF1 Antibody

Rabbit Anti Human Polyclonal Antibody Catalog # ALS17732

Specification

Anti-IGF1 Antibody - Product Information

WB, IHC-P, E, Neut Application

Primary Accession P05019 Predicted Human Rabbit Host Clonality **Polyclonal**

Isotype IqG Calculated MW 21841

Anti-IGF1 Antibody - Additional Information

Gene ID 3479

Alias Symbol IGF1

Other Names

IGF1, IGF-IA, IGF-IB, IGFI, IBP1, IGF-I, Insulin-like growth factor 1, Insulin-like growth factor I, Insulin-like growth factor IA, Insulin-like growth factor IB, Mechano growth factor, Somatomedin-C, IGF1A, MGF

Target/Specificity

Human IGF-I

Reconstitution & Storage

Immunoaffinity purified

Precautions

Anti-IGF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-IGF1 Antibody - Protein Information

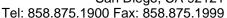
Name IGF1

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}.

Anti-IGF1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-IGF1 Antibody - Images