10320 Camino Santa Fe, Suite G
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Anti-IGF1/Igf I Rabbit Monoclonal Antibody
Catalog # ABO13370

Specification

Anti-IGF1/Igf I Rabbit Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	P05019
Host	**Rabbit**
Isotype	**Rabbit IgG**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-IGF1/Igf I Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with recombinant protein.

Anti-IGF1/Igf I Rabbit Monoclonal Antibody - Additional Information

Gene ID 3479

Other Names
Insulin-like growth factor I, IGF-I, Mechano growth factor, MGF, Somatomedin-C, IGF1, IBP1

Calculated MW
21841 MW KDa

Application Details
WB 1:500-1:2000

Subcellular Localization
Secreted.

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human IGF1

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

Anti-IGF1/Igf I Rabbit Monoclonal Antibody - Protein Information

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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: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:23243309, PubMed:23696648). 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/Igf I Rabbit Monoclonal 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

Anti-IGF1/Igf I Rabbit Monoclonal Antibody - Images

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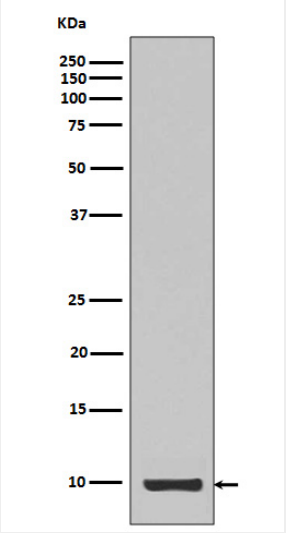

Western blot analysis of Calreticulin expression in IGF1 recombinant protein.