

IGF1 Rabbit mAb
Catalog # AP77465**Specification****IGF1 Rabbit mAb - Product Information**

| | |
|-------------------|----------------------------|
| Application | WB |
| Primary Accession | P05019 |
| Reactivity | Transfected |
| Host | Rabbit |
| Clonality | Monoclonal Antibody |
| Calculated MW | 21841 |

IGF1 Rabbit mAb - Additional Information

Gene ID 3479

Other Names

IGF1

Format

Liquid

IGF1 Rabbit mAb - Protein InformationName 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 IGF1R are essential for IGF1 signaling. Induces the phosphorylation and activation of IGF1R, 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}.

IGF1 Rabbit mAb - 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](#)

IGF1 Rabbit mAb - Images