

## **Anti-IGF1 Antibody (clone 1E11A3)**

Mouse Anti Human Monoclonal Antibody Catalog # ALS18465

### **Specification**

## Anti-IGF1 Antibody (clone 1E11A3) - Product Information

Application IHC, IHC-P, E
Primary Accession P05019
Predicted Human
Host Mouse
Clonality Monoclonal
Isotype IgG1,k
Calculated MW 21841

# Anti-IGF1 Antibody (clone 1E11A3) - Additional Information

**Gene ID 3479** 

Alias Symbol

**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

IGF1

### Target/Specificity

No cross reactivity with IGF-II or IGF-BP4.

#### **Reconstitution & Storage**

Protein A purified

## **Precautions**

Anti-IGF1 Antibody (clone 1E11A3) is for research use only and not for use in diagnostic or therapeutic procedures.

# Anti-IGF1 Antibody (clone 1E11A3) - 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:<a href="http://www.uniprot.org/citations/21076856" target="\_blank">21076856</a>, PubMed:<a



href="http://www.uniprot.org/citations/24132240" target="\_blank">24132240</a>). 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:<a href="http://www.uniprot.org/citations/19578119" target="\_blank">19578119</a><a href="http://www.uniprot.org/citations/2351760" target="\_blank">23351760</a><a href="http://www.uniprot.org/citations/23696648" target="\_blank">23243309</a><a href="http://www.uniprot.org/citations/23243309" target=

**Cellular Location** 

Secreted {ECO:0000250|UniProtKB:P05017}.

### Anti-IGF1 Antibody (clone 1E11A3) - 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 Antibody (clone 1E11A3) - Images