

**IGF1 Antibody (internal region)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF3332a****Specification**

---

**IGF1 Antibody (internal region) - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P05019</a>
Other Accession	<a href="#">NP_001104753.1</a> , <a href="#">NP_001104754.1</a> , <a href="#">NP_001104755.1</a> , <a href="#">NP_000609.1</a> , <a href="#">3479</a> , <a href="#">16000</a> <a href="#">(mouse)</a> , <a href="#">24482 (rat)</a>
Reactivity	<b>Human</b>
Predicted	<b>Mouse, Rat, Rabbit, Pig, Dog, Cow</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Concentration	<b>0.5 mg/ml</b>
Isotype	<b>IgG</b>
Calculated MW	<b>21841</b>

**IGF1 Antibody (internal region) - Additional Information****Gene ID** 3479**Other Names**

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

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

IGF1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**IGF1 Antibody (internal region) - 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>, PubMed:<a href="http://www.uniprot.org/citations/22351760" target="\_blank">22351760</a>, PubMed:<a href="http://www.uniprot.org/citations/23696648" target="\_blank">23696648</a>, PubMed:<a href="http://www.uniprot.org/citations/23243309" target="\_blank">23243309</a>). 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

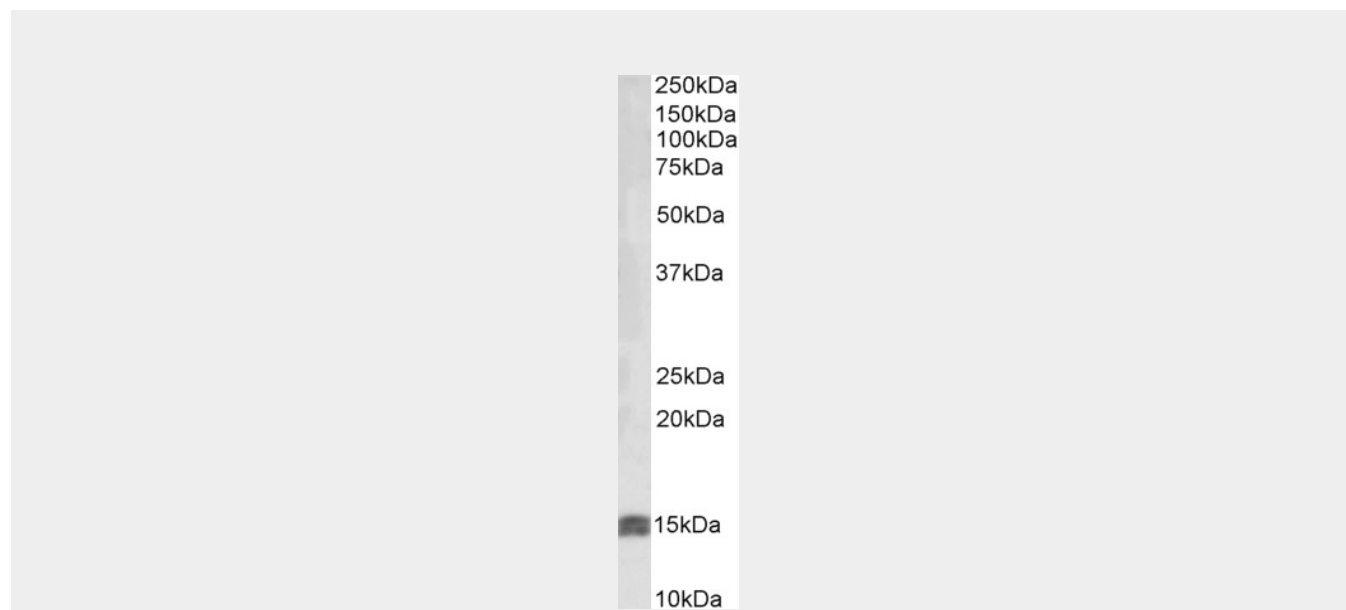
Secreted {ECO:0000250|UniProtKB:P05017}.

#### IGF1 Antibody (internal region) - 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 Antibody (internal region) - Images



AF3332a (0.5 µg/ml) staining of Human Uterus lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**IGF1 Antibody (internal region) - Background**

This antibody is expected to recognize all reported isoforms (NP\_001104753.1; NP\_001104754.1; NP\_001104755.1; NP\_000609.1).

**IGF1 Antibody (internal region) - References**

IGF-1 increases macrophage motility via PKC/p38-dependent alphavbeta3-integrin inside-out signaling. Furundzija V, Fritzsche J, Kaufmann J, Meyborg H, Fleck E, Kappert K, Stawowy P, Biochemical and biophysical research communications 2010 Apr 394 (3): 786-91. PMID: 20230795