10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IGF2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1749a

Specification

IGF2 Antibody - Product Information

Application	**E, WB, IF, FC, IHC**
Primary Accession	P01344
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**20.1kDa KDa**

Description
This gene encodes a member of the insulin family of polypeptide growth factors, which are involved in development and growth. It is an imprinted gene, expressed only from the paternal allele, and epigenetic changes at this locus are associated with Wilms tumour, Beckwith-Wiedemann syndrome, rhabdomyosarcoma, and Silver-Russell syndrome. A read-through INS-IGF2 gene exists, whose 5' region overlaps the INS gene and the 3' region overlaps this gene. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Immunogen
Purified recombinant fragment of human IGF2 (AA: 25-180) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

IGF2 Antibody - Additional Information

Gene ID 3481

Other Names
Insulin-like growth factor II, IGF-II, Somatomedin-A, T3M-11-derived growth factor, Insulin-like growth factor II, Insulin-like growth factor II Ala-25 Del, Preptin, IGF2

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400
IHC~~1/200 - 1/1000

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
IGF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IGF2 Antibody - Protein Information

Name IGF2 (HGNC:5466)

Function
The insulin-like growth factors possess growth-promoting activity (By similarity). Major fetal growth hormone in mammals. Plays a key role in regulating fetoplacental development. IGF2 is influenced by placental lactogen. Also involved in tissue differentiation. In adults, involved in glucose metabolism in adipose tissue, skeletal muscle and liver (Probable). Acts as a ligand for integrin which is required for IGF2 signaling (PubMed:28873464). Positively regulates myogenic transcription factor MYOD1 function by facilitating the recruitment of transcriptional coactivators, thereby controlling muscle terminal differentiation (By similarity). Inhibits myoblast differentiation and modulates metabolism via increasing the mitochondrial respiration rate (By similarity).

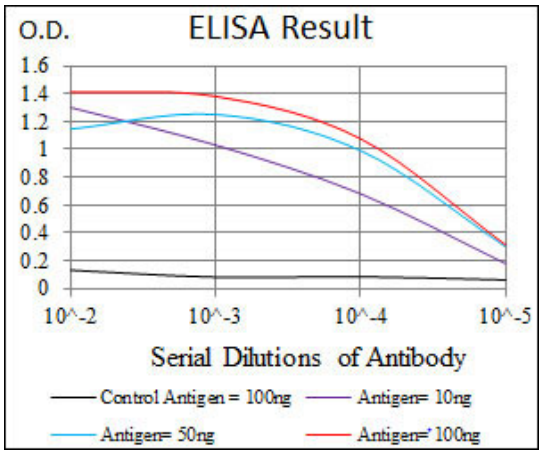
Cellular Location
Secreted.

Tissue Location
Expressed in heart, placenta, lung, liver, muscle, kidney, tongue, limb, eye and pancreas.

IGF2 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



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

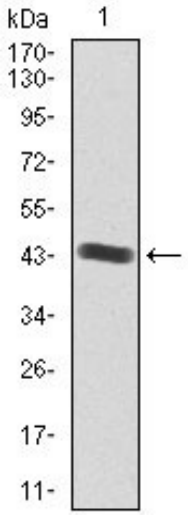


Figure 1: Western blot analysis using IGF2 mAb against human IGF2 recombinant protein. (Expected MW is 43.1 kDa)

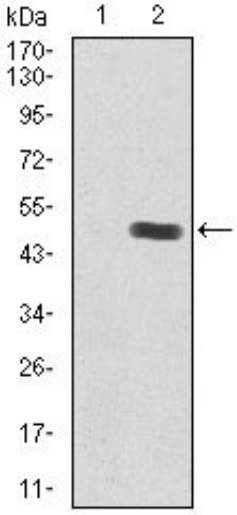


Figure 2: Western blot analysis using IGF2 mAb against HEK293 (1) and IGF2 (AA: 25-180)-hIgGFc transfected HEK293 (2) cell lysate.

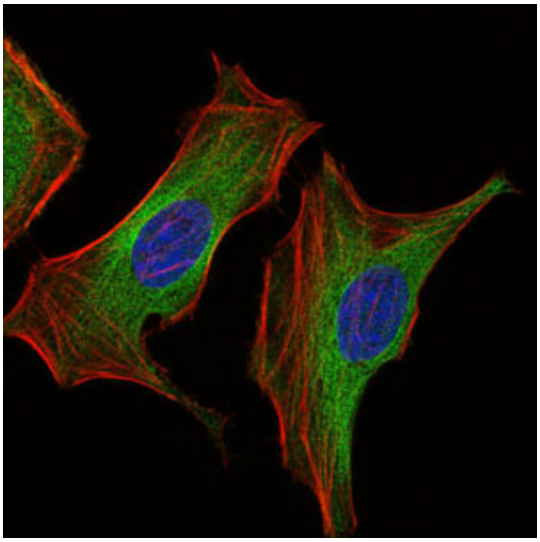


Figure 3: Immunofluorescence analysis of HeLa cells using IGF2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

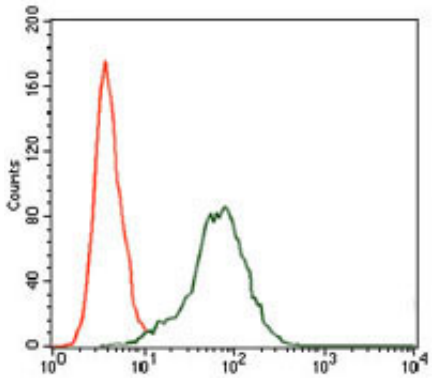


Figure 4: Flow cytometric analysis of HepG2 cells using IGF2 mouse mAb (green) and negative control (red).

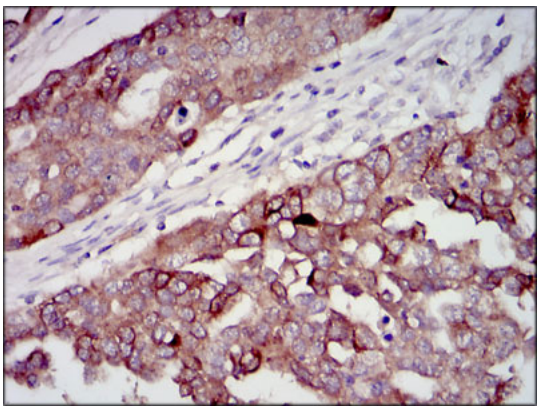


Figure 5: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using IGF2 mouse mAb with DAB staining.

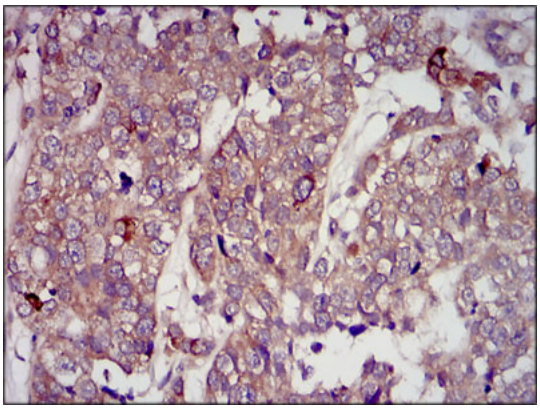


Figure 6: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using IGF2 mouse mAb with DAB staining.

IGF2 Antibody - References

1.Biomarkers. 2011 Jun;16(4):346-54.2.J Cancer Res Clin Oncol. 2011 Feb;137(2):339-45.