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

IGF2 Antibody (Center R54)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11220C

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P01344
Other Accession	NP_000603
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18750
Calculated MW	20140
Antigen Region	39-68

Additional Information

Gene ID	3481
Other Names	Insulin-like growth factor II, IGF-II, Somatomedin-A, Insulin-like growth factor II, Insulin-like growth factor II Ala-25 Del, Preptin, IGF2
Target/Specificity	This IGF2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-68 amino acids from the Central region of human IGF2.
Dilution	WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IGF2 Antibody (Center R54) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

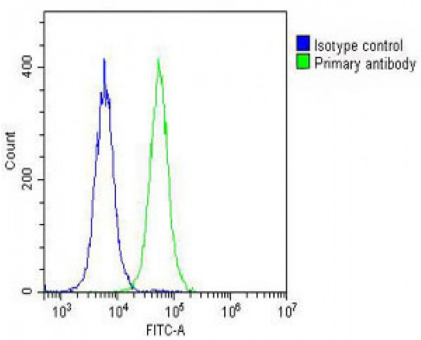
Background

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.

References

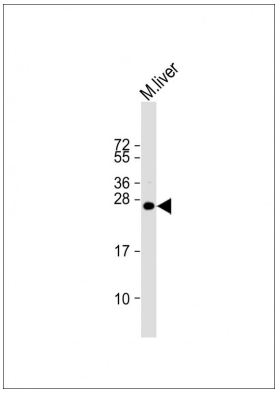
Adkins, R.M., et al. Pediatr. Res. 68(5):429-434(2010)
Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :
Li, J., et al. Mol. Biol. Rep. (2010) In press :
Hsieh, Y.Y., et al. Anticancer Res. 30(6):2203-2208(2010)
Turan, N., et al. PLoS Genet. 6 (7), E1001033 (2010) :

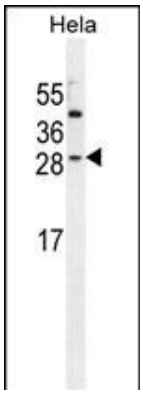
Images



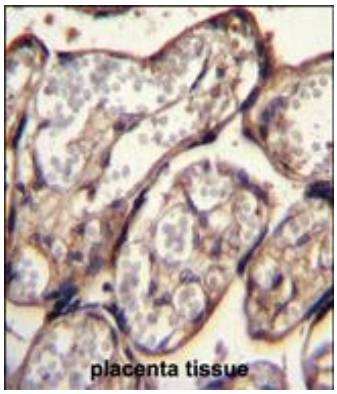
Overlay histogram showing Hela cells stained with AP11220c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP11220c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

Anti-IGF2 Antibody (Center R54) at 1:2000 dilution + mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 20 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

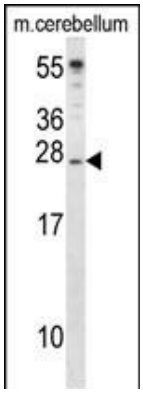




IGF2 Antibody (Center R54) (Cat. #AP11220c) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the IGF2 antibody detected the IGF2 protein (arrow).

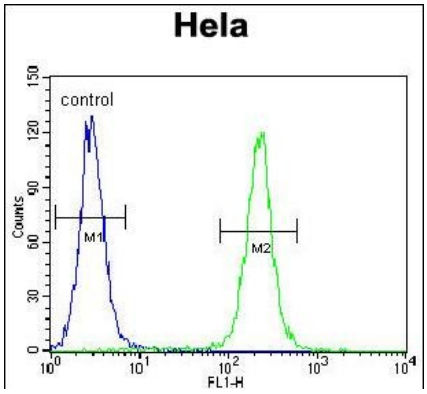


IGF2 Antibody (Center R54) (Cat. #AP11220c)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of IGF2 Antibody (Center R54) for immunohistochemistry. Clinical relevance has not been evaluated.



IGF2 Antibody (Center R54) (Cat. #AP11220c) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the IGF2 antibody detected the IGF2 protein (arrow).

IGF2 Antibody (Center R54) (Cat. #AP11220c) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Citations

- CD44 fibroblasts increases breast cancer cell survival and drug resistance via IGF2BP3-CD44-IGF2 signalling.