

ACTR-IC Polyclonal Antibody

Catalog No: YT0107

Reactivity: Human; Mouse; Rat

Applications: IHC;IF;ELISA

Target: ACTR-IC

Fields: >>Cytokine-cytokine receptor interaction;>>TGF-beta signaling

pathway;>>Signaling pathways regulating pluripotency of stem cells

Gene Name : ACVR1C

Protein Name: Activin receptor type-1C

Q8NER5

Q8K348

Human Gene Id: 130399

Human Swiss Prot

No:

Mouse Gene ld: 269275

Mouse Swiss Prot

No:

Rat Gene Id: 245921

Rat Swiss Prot No: P70539

Immunogen: The antiserum was produced against synthesized peptide derived from human

ACTR-1C. AA range:201-250

Specificity: ACTR-IC Polyclonal Antibody detects endogenous levels of ACTR-IC protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other

applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 55kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;Endocytosis;TGF-

beta; Adherens Junction; Pathways in cancer; Colorectal cancer; Pancreatic

cancer; Chronic myeloid leukemia;

Background: ACVR1C is a type I receptor for the TGFB (see MIM 190180) family of signaling

molecules. Upon ligand binding, type I receptors phosphorylate cytoplasmic SMAD transcription factors, which then translocate to the nucleus and interact directly with DNA or in complex with other transcription factors (Bondestam et al...

2001 [PubMed 12063393]).[supplied by OMIM, Mar 2008],

Function: catalytic activity:ATP + [receptor-protein] = ADP + [receptor-protein]

phosphate.,cofactor:Magnesium or manganese.,function:Serine/threonine protein kinase which forms a receptor complex on ligand binding. The receptor complex consisting of 2 type II and 2 type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators, SMAD2 and SMAD3. Receptor for activin AB, activin B and NODAL. Plays a role in cell differentiation, growth arrest and apoptosis.,similarity:Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily.,similarity:Contains 1 GS domain.,similarity:Contains 1 protein kinase domain.,subunit:Binds the type 2 receptor protein ACVR2A.,tissue specificity:Present in pancreas, heart, colon,

small intestine, ovary and

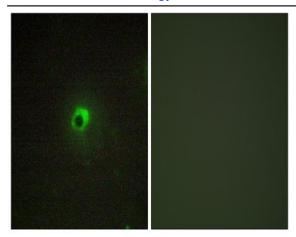
Subcellular Location : Membrane; Single-pass type I membrane protein.

Expression: Present in pancreas, heart, colon, small intestine, ovary and the hippocampus,

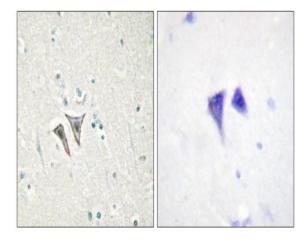
medulla oblongata and putamen of the brain. Isoform 1, isoform 2, isoform 3 and

isoform 4 are all expressed in the placenta throughout pregnancy.

Products Images



Immunofluorescence analysis of COS7 cells, using ACTR-1C Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using ACTR-1C Antibody. The picture on the right is blocked with the synthesized peptide.