

Summary

Production Name	ACTR-IC Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ACVR1C
Alternative Names	ACVR1C; ALK7; Activin receptor type-1C; Activin receptor type IC; ACTR-IC; Activin receptor-like kinase 7; ALK-7
Gene ID	130399.0
SwissProt ID	Q8NER5.The antiserum was produced against synthesized peptide derived from human ACTR-1C. AA range:201-250

Application

Dilution Ratio	IHC-P 1:100-1:300, IF-P/IF-F/ICC/IF 1:200-1:1000, ELISA 1:20000.Not yet tested in other applications.
Molecular Weight	

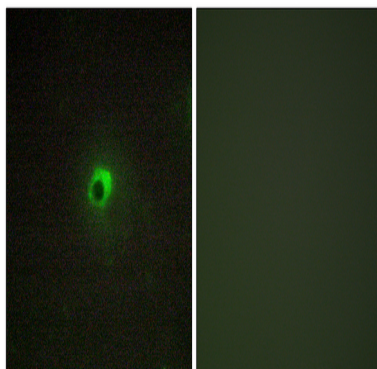
Background

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],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 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.,

Research Area

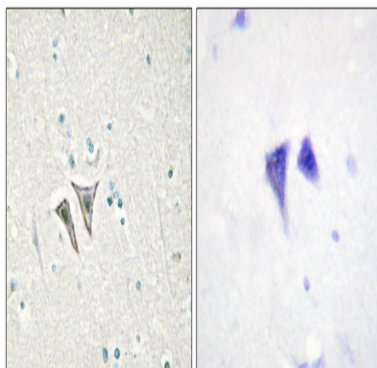
MAPK_ERK_Growth;MAPK_G_Protein;Endocytosis;TGF-beta;Adherens_Junction;Pathways in cancer;Colorectal cancer;Pancreatic cancer;Chronic myeloid leukemia;

Image Data



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

Product Name: ACTR-1C Rabbit Polyclonal Antibody
Catalog #: APRab06563



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

Note

For research use only.