



ACTR-IC Polyclonal Antibody

Catalog No	YP-Ab-13134
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;ELISA
Gene Name	ACVR1C
Protein Name	Activin receptor type-1C
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ACVR1C; ALK7; Activin receptor type-1C; Activin receptor type IC; ACTR-IC; Activin receptor-like kinase 7; ALK-7
Observed Band	
Cell Pathway	Membrane ; Single-pass type I membrane protein .
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.
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



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],

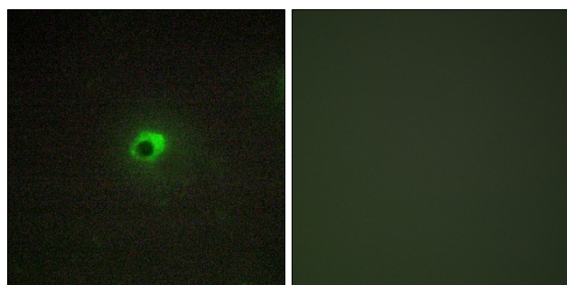
matters needing attention

Avoid repeated freezing and thawing!

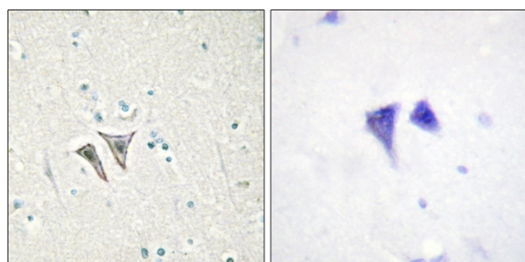
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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.