

Mouse Acvr1c Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14606b

Product Information

Application	WB, E
Primary Accession	Q8K348
Other Accession	P70539 , Q8NER5 , NP_001104500.1
Reactivity	Mouse
Predicted	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34725
Calculated MW	54700
Antigen Region	341-368

Additional Information

Gene ID	269275
Other Names	Activin receptor type-1C, Activin receptor type IC, ACTR-IC, Activin receptor-like kinase 7, ALK-7, Acvr1c {ECO:0000312 EMBL:AAH287801}
Target/Specificity	This Mouse Acvr1c antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 341-368 amino acids from the C-terminal region of mouse Acvr1c.
Dilution	WB~~1:1000 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	Mouse Acvr1c Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Acvr1c {ECO:0000312 EMBL:AAH28780.1}
Function	Serine/threonine protein kinase which forms a receptor complex on ligand binding. The receptor complex consists 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, activin E and NODAL. Upon NODAL binding, activation results in increased apoptosis and reduced proliferation through suppression of AKT signaling and the activation of Smad2-dependent signaling pathway in pancreatic beta-cells, trophoblasts, epithelial or neuronal cells (PubMed:[18480258](#), PubMed:[36403856](#)). Acts as a positive regulator for macrophage activation partially through down-regulation of PPARG expression (PubMed:[32641645](#)).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

Expressed in interdigital regions in developing limb buds.

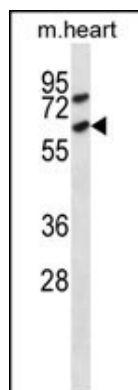
Background

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.

References

Andersson, O., et al. Proc. Natl. Acad. Sci. U.S.A. 105(20):7252-7256(2008)
Bertolino, P., et al. Proc. Natl. Acad. Sci. U.S.A. 105(20):7246-7251(2008)
Liguori, G.L., et al. Dev. Biol. 315(2):280-289(2008)
Kurrasch, D.M., et al. J. Neurosci. 27(50):13624-13634(2007)
Kogame, M., et al. J. Med. Invest. 53 (3-4), 238-245 (2006) :

Images



Mouse Acvr1c Antibody (C-term) (Cat. #AP14606b) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the Acvr1c antibody detected the Acvr1c protein (arrow).

Citations

- [ALK7 protects against pathological cardiac hypertrophy in mice.](#)