

ACVR1B antibody

Product Information

Catalog No.:	FNab00129
Size:	100μg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	≥95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
Clone ID:	None
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

Background

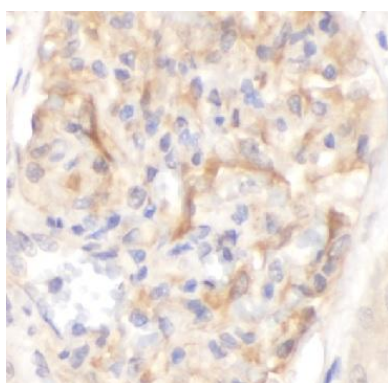
Transmembrane serine/threonine kinase activin type-1 receptor forming an activin receptor complex with activin receptor type-2(ACVR2A or ACVR2B). Transduces the activin signal from the cell surface to the cytoplasm and is thus regulating a many physiological and pathological processes including neuronal differentiation and neuronal survival, hair follicle development and cycling, FSH production by the pituitary gland, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. Activin is also thought to have a paracrine or autocrine role in follicular development in the ovary. Within the receptor complex, type-2 receptors(ACVR2A and/or ACVR2B) act as a primary activin receptors whereas the type-1 receptors like ACVR1B act as downstream transducers of activin signals. Activin binds to type-2 receptor at the plasma membrane and activates its serine-threonine kinase. The activated receptor type-2 then phosphorylates and activates the type-1 receptor such as ACVR1B. Once activated, the type-1 receptor binds and phosphorylates the SMAD proteins SMAD2 and SMAD3, on serine residues of the C-terminal tail. Soon after their association with the activin receptor and subsequent phosphorylation, SMAD2 and SMAD3 are released into the cytoplasm where they interact with the common partner SMAD4. This SMAD complex translocates into the nucleus where it mediates activin-induced transcription. Inhibitory SMAD7, which is recruited to ACVR1B through FKBP1A, can prevent the association of SMAD2 and SMAD3 with the activin receptor complex, thereby blocking the activin signal. Activin signal transduction is also antagonized by the binding to the receptor of inhibin-B via the IGSF1 inhibin coreceptor. ACVR1B also phosphorylates TDP2.

Immunogen information

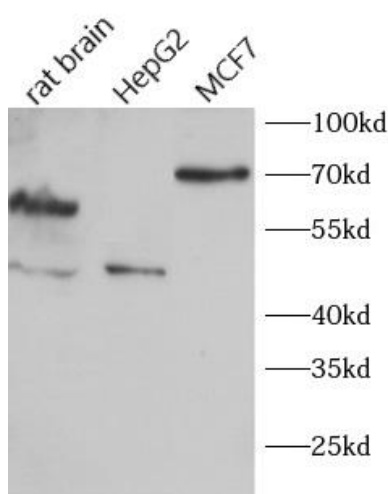
Immunogen:	activin A receptor, type IB
Synonyms:	Activin receptor type-1B Activin receptor type IB (ACTR-IB) Activin receptor-like kinase 4 (ALK-4) Serine/threonine-protein kinase receptor R2 (SKR2) ACVR1B ACVRLK4 ALK4
Observed MW:	50 kDa-70 kDa
Uniprot ID :	P36896

Application

Reactivity:	Human, Mouse, Rat
Tested Application:	ELISA, WB, IHC
Recommended dilution:	WB: 1:200-1:2000; IHC: 1:20-1:200
Image:	



Immunohistochemistry of paraffin-embedded human kidney using FNab00129(ACVR1B antibody) at dilution of 1:100



various lysates were subjected to SDS PAGE followed by western blot with FNab00129(ACVR1B Antibody) at dilution of 1:1000