

ACVR1B / ALK4 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS12396**Specification**

ACVR1B / ALK4 Antibody (C-Terminus) - Product Information

Application	IHC
Primary Accession	P36896
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57kDa KDa

ACVR1B / ALK4 Antibody (C-Terminus) - Additional Information**Gene ID** 91**Other Names**

Activin receptor type-1B, 2.7.11.30, Activin receptor type IB, ACTR-IB, Activin receptor-like kinase 4, ALK-4, Serine/threonine-protein kinase receptor R2, SKR2, ACVR1B, ACVRLK4, ALK4

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

ACVR1B / ALK4 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

ACVR1B / ALK4 Antibody (C-Terminus) - Protein Information**Name** ACVR1B**Synonyms** ACVRLK4, ALK4**Function**

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.

Cellular Location

Cell membrane; Single-pass type I membrane protein

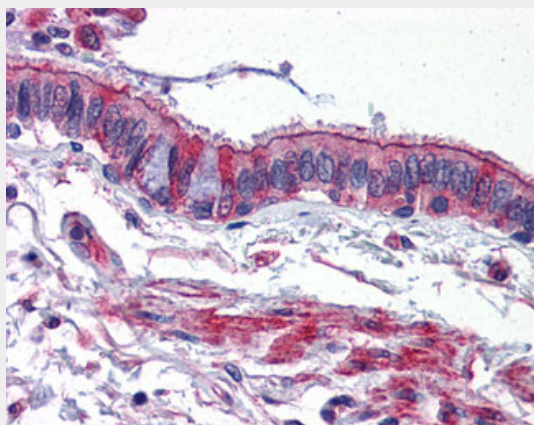
Tissue Location

Expressed in many tissues, most strongly in kidney, pancreas, brain, lung, and liver

ACVR1B / ALK4 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ACVR1B / ALK4 Antibody (C-Terminus) - Images

Anti-ACVR1 antibody IHC of human lung.

ACVR1B / ALK4 Antibody (C-Terminus) - Background

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ACVR1B / ALK4 Antibody (C-Terminus) - References

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