

# anti- ACVR1B antibody

## **Product Information**

Catalog No.:	FNab00129	
Size:	100µg	
Form:	liquid	
Purification:	Immunogen affinity purified	
Purity:	$\geq$ 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.

#### Wuhan Fine Biotech Co., Ltd.

B9 Bld, High-Tech Medical Devices Park, No. 818 Gaoxin Ave.East Lake High-Tech Development Zone.Wuhan, Hubei, China(430206)

Tel :( 0086)027-87384275

1

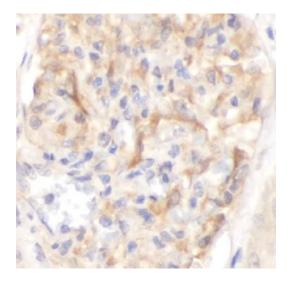


## **Immunogen information**

Immunogen:	activin A receptor, type IB
Synonyms:	Activin A receptor, type IB, Activin receptor like kinase 4, Activin receptor type 1B, Activin receptor type IB, ACTR IB, ACTRIB, ACVR1B, ACVR1B, ACVRLK4, ALK 4, ALK4, SKR2
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

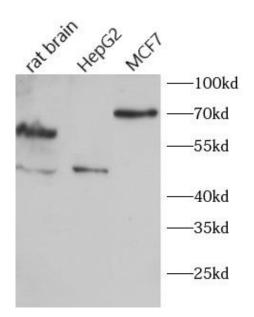
#### Wuhan Fine Biotech Co., Ltd.

B9 Bld, High-Tech Medical Devices Park, No. 818 Gaoxin Ave.East Lake High-Tech Development Zone.Wuhan, Hubei, China(430206)

Tel :( 0086)027-87384275

2





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

3

Wuhan Fine Biotech Co., Ltd.

B9 Bld, High-Tech Medical Devices Park, No. 818 Gaoxin Ave.East Lake High-Tech Development Zone.Wuhan, Hubei, China(430206)

Tel :( 0086)027-87384275

www.fn-test.com