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## ACVR2B Antibody

Product Code	CSB-PA623829ESR1HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q13705
Immunogen	Recombinant Human Activin receptor type-2B protein (19-140AA)
Raised In	Rabbit
Species Reactivity	Human
<b>Tested Applications</b>	ELISA, IHC; Recommended dilution: IHC:1:20-1:200
Relevance	Transmembrane serine/threonine kinase activin type-2 receptor forming an activin receptor complex with activin type-1 serine/threonine kinase receptors (ACVR1, ACVR1B or ACVR1c). Transduces the activin signal from the cell surface to the cytoplasm and is thus regulating 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, the type-2 receptors act as a primary activin receptors (binds activin-A/INHBA, activin-B/INHBB as well as inhibin-A/INHA-INHBA). 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. 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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Purification Method	Antigen Affinity Purified
Isotype	lgG
Clonality	Polyclonal
Alias	Activin receptor type-2B (EC 2.7.11.30) (Activin receptor type IIB) (ACTR-IIB), ACVR2B



## **CUSABIO TECHNOLOGY LLC**

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Species	Human
Research Area	Signal Transduction
Target Names	ACVR2B
Image	Immunohistochemistry of paraffin-embedded



Immunohistochemistry of paraffin-embeddec human breast cancer using CSB-PA623829ESR1HU at dilution of 1:100