

Anti-ACVR2B (ECD domain) Neutralizing Antibody (V3S-0622-YC631)

Cat. No.: V3S-0622-YC631

Summary

Description	This product is a human monoclonal antibody that reacts with ACVR2B. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation. Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (<1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Human
Target Species	Human
Immunogen	Human ActRIIB ECD, ActRIIB-Fc (for library screening)
Epitope	In the extracellular domain
Isotype	IgG
Isotype Control	C34555
Secondary Antibody	C32400; C75370; C10513; C51635; C45530

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 µM filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	Store at 4°C within a week. For longer storage, aliquot and store at -20°C.

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

Applications

Application	FuncS
Application Notes	The antibody is recommended for detection of ACVR2B by FuncS assay.

Target

Target	ACVR2B
Alternative Name	ACVR2B; activin A receptor, type IIB; HTX4; ACTRIIB; ActR-II
Gene ID	93
UniProt	Q13705

Introduction

Activins are dimeric growth and differentiation factors which belong to the transforming growth factor-beta (TGF-beta) superfamily of structurally related signaling proteins. Activins signal through a heteromeric complex of receptor serine kinases which include at least two type I (I and IB) and two type II (II and IIB) receptors. These receptors are all transmembrane proteins, composed of a ligand-binding extracellular domain with cysteine-rich region, a transmembrane domain, and a cytoplasmic domain with predicted serine/threonine specificity. Type I receptors are essential for signaling; and type II receptors are required for binding ligands and for expression of type I receptors. Type I and II receptors form a stable complex after ligand binding, resulting in phosphorylation of type I receptors by type II receptors. Type II receptors are considered to be constitutively active kinases. This protein is activin A type IIB receptor, which displays a 3- to 4-fold higher affinity for the ligand than activin A type II receptor.

Research Area Signal Pathway

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