

Rabbit Anti-ACVR2A antibody

SL0804R

Product Name	ACVR2A
Chinese Name	激活素受体 2A 抗体
Alias	Activin receptor 2A; Activin receptor type 2A; ACTR 2; ACTR IIA; ACTR2; ActRIIa; Acvr 2; Acvr 2A; Acvr2; Acvr2a; OTTHUMP00000197918; ACVR2A; Activin receptor type-2A.
Research Area	transcriptional regulatory factor
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat (predicted:Human,Mouse,Chicken,Dog,Cow,Rabbit,Sheep)
Applications	ELISA=1:5000-10000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	57kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human ACVR2A: 31-120/513 <Extracellular>
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	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. Activin has been suggested to be an autocrine/paracrine regulator in the human placenta. The presence of ACVR2 mRNA has been demonstrated in human trophoblast cells and there is also evidence of expression of the gene in human brain and ovary.

Function:

On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for activin A, activin B and inhibin A.

Subunit:

Interacts with AIP1. Part of a complex consisting of AIP1, ACVR2A, ACVR1B and SMAD3.

Subcellular Location:

Membrane; Single-pass type I membrane protein.

Similarity:

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGF β receptor subfamily.
Contains 1 protein kinase domain.

SWISS:

P27037

Gene ID:

92

Database links:

[Entrez Gene: 92](#) Human

[Entrez Gene: 11480](#) Mouse

[Entrez Gene: 29263](#) Rat

[Omim: 102581](#) Human

[SwissProt: P27037](#) Human

[SwissProt: P27038](#) Mouse

[SwissProt: P38444](#) Rat

[Unigene: 470174](#) Human

[Unigene: 314338](#) Mouse

[Unigene: 161783](#) Rat

激活素受体IIA- ARIP2a 属于 ARIP 家族新成员，在脑组织、垂体、睾丸中表达较高，胰腺、卵巢组织中有表达。