



Rabbit Anti-BMPR2 antibody

SL4237R

Product Name:	BMPR2
Chinese Name:	骨形态发生蛋白2受体抗体
Alias:	BMP type II receptor; BMP type-2 receptor; BMPR 2; BMPR 3; BMPR II; BMPR-2; BMPR-II; Bmpr2; BMPR2_HUMAN; BMPR3; BMPRII; BMR 2; BMR2; Bone morphogenetic protein receptor type 2; Bone morphogenetic protein receptor type II; Bone morphogenetic protein receptor type-2; Bone morphogenic protein receptor type II serine threonine kinase; BRK 3; BRK3; PPH 1; PPH1; Serine threonine kinase type II activin receptor like kinase; T ALK; TALK; Type II activin receptor like kinase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	112kDa
Cellular localization:	The nucleusThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BMPR2:921-1038/1038
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. Binds to BMP-7, BMP-2 and, less efficiently, BMP-4. Binding is weak but enhanced by the presence of type I receptors for BMPs.

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. Binds to BMP-7, BMP-2 and, less efficiently, BMP-4. Binding is weak but enhanced by the presence of type I receptors for BMPs.

Subcellular Location:

Membrane.

Tissue Specificity:

Highly expressed in heart and liver.

DISEASE:

Defects in BMPR2 are the cause of primary pulmonary hypertension (PPH1) [MIM:178600]. PPH1 is a rare autosomal dominant disorder characterized by plexiform lesions of proliferating endothelial cells in pulmonary arterioles. The lesions lead to elevated pulmonary arterial pressure, right ventricular failure, and death. The disease can occur from infancy throughout life and it has a mean age at onset of 36 years. Penetrance is reduced. Although familial PPH1 is rare, cases secondary to known etiologies are more common and include those associated with the appetite-suppressant drugs. Defects in BMPR2 are a cause of pulmonary venoocclusive disease (PVOD) [MIM:265450]. PVOD is a rare form of pulmonary hypertension in which the vascular changes originate in the small pulmonary veins and venules. The pathogenesis is unknown and any link with PPH1 has been speculative. The finding of PVOD associated with a BMPR2 mutation reveals a possible pathogenetic connection with PPH1.

Similarity:

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

SWISS:

Q13873

Gene ID:

659

Database links:

[Entrez Gene: 659](#) Human

[Entrez Gene: 12168](#) Mouse

[Entrez Gene: 140590](#) Rat

[Omim: 600799](#) Human

[SwissProt: Q13873](#) Human

[SwissProt: O35607](#) Mouse

[Unigene: 471119](#) Human

[Unigene: 391654](#) Mouse

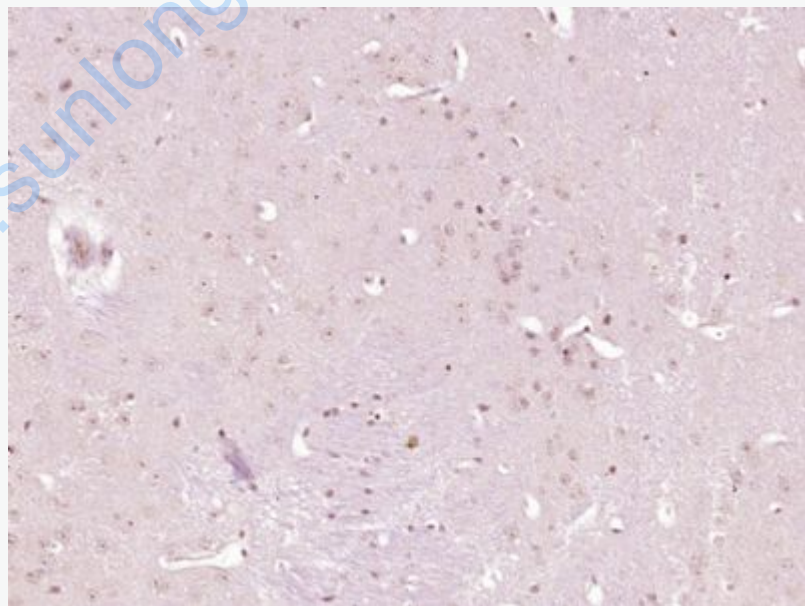
[Unigene: 7106](#) Mouse

[Unigene: 40848](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C

for 30min; Antibody incubation with (BMPR2) Polyclonal Antibody, Unconjugated (SL4237R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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