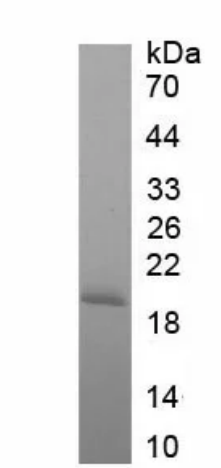
Active Bone Morphogenetic Protein Receptor 2 (BMPR2)

Catalog#:PEH12016

概述（Summary）

别称（Alternative Names）	BMPRII; BMPR-II; BRK3; T-ALK; BMPR3; PPH1; Primary Pulmonary Hypertension 1; BMP type II receptor
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ser27-Thr150】
Accession #	Q13873
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	17.7 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	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 BMP7, BMP2 and, less efficiently, BMP4. Binding is weak but enhanced by the presence of type I receptors for BMPs. Mediates induction of adipogenesis by GDF6.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

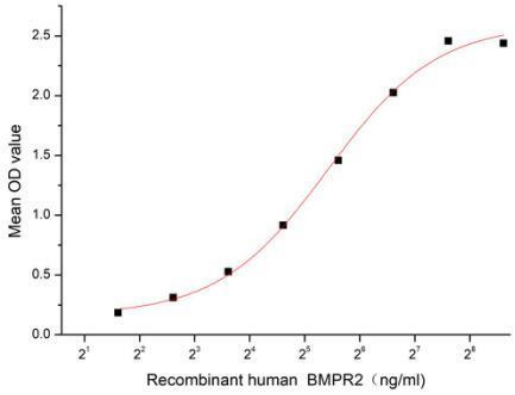


Figure 1. The binding activity of recombinant human BMPR2 and recombinant human GDF9

Bone Morphogenetic Protein Receptor 2 (BMPR2) is a member of the bone morphogenetic protein (BMP) receptor family of transmembrane serine/threonine kinases. BMPR2 is a TGFβ type II receptor expressed on cumulus cells. Growth Differentiation Factor 9 (GDF9) can bind to BMPR2 through different type I receptors, thereby regulating downstream metabolic reactions. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human BMPR2 and recombinant human GDF9. Briefly, biotin-linked BMPR2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to GDF9-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human BMPR2 and recombinant human GDF9 was shown in Figure 1, the EC50 for this effect is 42.87 ng/mL.

注意事项（Note）

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