

Anti-EG-VEGF Picoband Antibody

Catalog # ABO12568

Product Information

Application	WB
Primary Accession	Q14A28
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Prokineticin-1(PROK1) detection. Tested with WB in Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	246691
Other Names	Prokineticin-1 {ECO:0000312 EMBL:AAI17009.1}, Endocrine-gland-derived vascular endothelial growth factor, Prok1 {ECO:0000312 MGI:MGI:2180370}
Calculated MW	11678
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse
Subcellular Localization	Secreted .
Tissue Specificity	Highly expressed in liver and ovary and weakly expressed in testis and placenta. Expressed in mucosa and mesenchyme of embryonic gut during enteric nervous system development (at protein level). Predominantly expressed in kidney and liver. Also expressed in lung, ovary, placenta and testis. In fetal liver, is restricted to and highly expressed in hepatocytes. In adult kidney, expression is restricted to the endothelial tubule cells. In placenta, expressed throughout gestation. .
Source	Eukaryota
Protein Name	Prokineticin-1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived mouse Prokineticin 1 recombinant protein (Position: A20-F105). Mouse Prokineticin 1 shares 88.4% and 94.2% amino acid (aa) sequence identity with human and rat Prokineticin 1, respectively.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	Prok1 {ECO:0000312 MGI:MGI:2180370}
Function	Potently contracts gastrointestinal (GI) smooth muscle. Induces proliferation, migration and fenestration (the formation of membrane discontinuities) in capillary endothelial cells. Induces proliferation and differentiation, but not migration, of enteric neural crest cells. Directly influences neuroblastoma progression by promoting the proliferation and migration of neuroblastoma cells. Positively regulates PTGS2 expression and prostaglandin synthesis. May play a role in placenta. May play a role in normal and pathological testis angiogenesis.
Cellular Location	Secreted {ECO:0000250 UniProtKB:P58294}.
Tissue Location	Highly expressed in liver and ovary and weakly expressed in testis and placenta. Expressed in mucosa and mesenchyme of embryonic gut during enteric nervous system development (at protein level). Predominantly expressed in kidney and liver. Also expressed in lung, ovary, placenta and testis. In fetal liver, is restricted to and highly expressed in hepatocytes. In adult kidney, expression is restricted to the endothelial tubule cells. In placenta, expressed throughout gestation.

Background

Prokineticin-1 is also known as EG-VEGF. The International Radiation Hybrid Mapping Consortium mapped the PROK1 gene to chromosome 1. The protein encoded by this gene induces proliferation, migration, and fenestration (the formation of membrane discontinuities) in capillary endothelial cells derived from endocrine glands. It has little or no effect on a variety of other endothelial and non-endothelial cell types. Its expression is restricted to the steroidogenic glands (ovary, testis, adrenal, and placenta), is induced by hypoxia, and often complementary to the expression of vascular endothelial growth factor (VEGF), suggesting that these molecules function in a coordinated manner.

Images



Western blot analysis of Prokineticin 1 expression in mouse liver extract (lane 1) and mouse spleen extract (lane 2). Prokineticin 1 at 10KD, 23KD was detected using rabbit anti- Prokineticin 1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12568) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .