Datasheet for ABIN2859217

NRP2 ELISA Kit

1 Image

Go to Product page

Overview

Quantity:	96 tests
Target:	NRP2
Binding Specificity:	AA 23-863
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Neuropilin-2
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Cell Lysate, Tissue Homogenate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q23-D863
Specificity:	Expression system for standard: NSO Immunogen sequence: Q23-D863
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

Target:	NRP2
Alternative Name:	NRP2 (NRP2 Products)
Background:	Protein Function: High affinity receptor for semaphorins 3C, 3F, VEGF-165 and VEGF-145 isoforms of VEGF, and the PLGF-2 isoform of PGF. Background: NRP2(Neuropilin-2), also called Npn2 or VEGF165R2, encodes a member of the neuropilin family of receptor proteins. The soluble NRP2 was secreted as a 62.5-kD protein following transfection in Chinese hamster ovary cells. The NRP2 gene is mapped to 2q33.3. The NRP2 gene contains 17 exons and spans about 112 kb. This protein may play a role in cardiovascular development, axon guidance, and tumorigenesis. Mice with null mutations in genes encoding Sema3F, and its holoreceptor components Npn2 and plexin A3 (PLEXA3), exhibit increased dentate gyrus granule cell and cortical layer V pyramidal neuron spine number and size, and also aberrant spine distribution. Moreover, Sema3F promotes loss of spines and excitatory synapses in dissociated neurons in vitro, and in NRP2-null brain slices cortical layer V and dentate gyrus granule cells exhibit increased miniature excitatory postsynaptic current frequency. These disparate effects of secreted semaphorins are reflected in the restricted dendritic localization of NRP2 to apical dendrites and of Npn1 to all dendrites of cortical pyramidal neurons. Synonyms: Neuropilin-2,Vascular endothelial cell growth factor 165 receptor 2,Nrp2, Full Gene Name: Neuropilin-2 Cellular Localisation: Membrane, Single-pass type I membrane protein.
Gene ID:	18187
UniProt:	O35375
Pathways:	Signaling Events mediated by VEGFR1 and VEGFR2, VEGFR1 Specific Signals

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well

Application Details

	assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the neuropilin family. Tissue Specificity: Expressed in developing CNS, PNS and in some nonneural tissues including limb buds, developing bones, muscles, intestinal epithelium, kidney, lung and submandibular gland.
Plate:	Pre-coated
Protocol:	mouse Neuropilin-2 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Neuropilin-2 has been precoated onto 96-well plates. Standards(NSO, Q23-D863) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Neuropilin-2 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse Neuropilin-2 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL mouse Neuropilin-2 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, cell lysates or tissue homogenates to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse Neuropilin-2 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 1590, Standard deviation: 68.37, CV(%): 4.3 • Sample 2: n=16, Mean(pg/ml): 3425, Standard deviation: 178.1, CV(%): 5.2 • Sample 3: n=16, Mean(pg/ml): 6308, Standard deviation: 359.6, CV(%): 5.7, • Sample 1: n=24, Mean(pg/ml): 1736, Standard deviation: 95.48, CV(%): 5.5 • Sample 2: n=24, Mean(pg/ml): 3621, Standard deviation: 231.7, CV(%): 6.4 • Sample 3: n=24, Mean(pg/ml): 6738, Standard deviation: 464.9, CV(%): 6.9
Restrictions:	For Research Use only

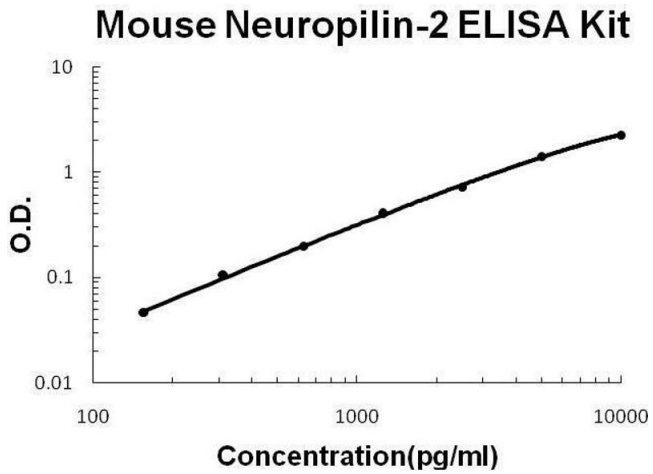
Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Handling

Expiry Date:	12 months

Images



ELISA

Image 1. Mouse Neuropilin-2 PicoKine ELISA Kit standard curve