APA672Ra01 100μg
Active Slit Homolog 2 (Slit2)
Organism Species: *Rattus norvegicus* (Rat)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Asn209~Gly374
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 6.8
Predicted Molecular Mass: 19.9kDa
Accurate Molecular Mass: 20kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

NN LYCDCHLAWL SDWLRQRPRV GLYTQCMGPS HLRGHNVAEV QKREFVCSDE EEGHQSFMAP SCSVLHCPIA CTCSNNIVDC RGKGLTEIPT NLPETITEIR LEQNSIRVIP PGAFSPYKKL RRLDLSNNQI SELAPDAFQG LRSLNSLVLY GNKITELPKS LFEG

[ACTIVITY]

Slit is a family of secreted extracellular matrix proteins which play an important signalling role in the neural development of most bilaterians. Humans, mice and other vertebrates possess three Slit homologs: Slit1, Slit2 and Slit3. The Slit2 protein has recently been discovered to be associated with the development of new blood vessels from pre-existing vessels, or angiogenesis. Slit2 has been implicated in promoting angiogenesis in mice (both in vitro and in vivo), in the human placenta, and in tumorigenesis. Besides, Gremlin 1 (GREM1) has been identified as an interactor of Slit2, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat Slit2 and recombinant rat GREM1. Briefly, Slit2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to GREM1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-Slit2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 ℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of Slit2 and GREM1 was shown in Figure 1, and this effect was in a dose dependent manner.

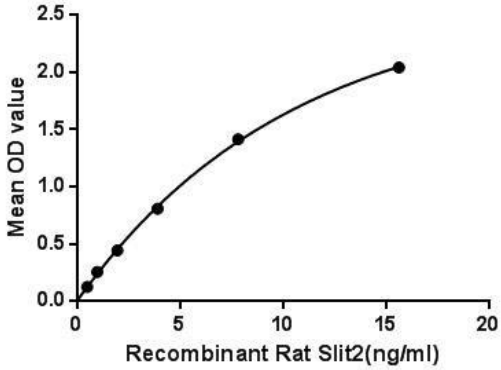

Figure 1. The binding activity of Slit2 with GREM1.

[IDENTIFICATION]

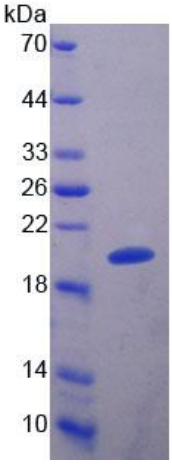

Figure 2. SDS-PAGE

Sample: Active recombinant Slit2, Rat

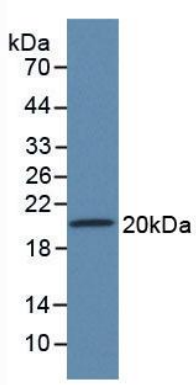

Figure 3. Western Blot

Sample: Recombinant Slit2, Rat;

Antibody: Rabbit Anti-Rat Slit2 Ab (PAA672Ra01)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.