

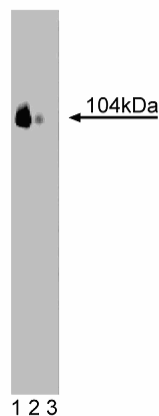
Technical Data Sheet

Purified Mouse Anti-Rat Neuropilin-2**Product Information**

Material Number:	611262
Alternate Name:	NP-2
Size:	50 µg
Concentration:	250 µg/ml
Clone:	54/Neuropilin-2
Immunogen:	Rat Neuropilin-2 aa.610-721
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat
Target MW:	104 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

The precise navigation of axons to their targets in the developing nervous system is essential for establishment of neuronal connectivity. This is achieved through the recognition of attractant and repellent signals delivered to neurons by the netrins and semaphorins, which interact with receptors on axons and growth cones. The semaphorins are a large family of secreted and transmembrane glycoproteins that function as chemorepellents of developing neurons. Neuropilin-1 (NP-1) and neuropilin-2 (NP-2) (44% amino acid identity) are receptors for various members of the secreted semaphorin family. While NP-1 binds to class III semaphorins (Sema III, Sema E, and Sema IV), NP-2 is a high affinity receptor for Sema E and Sema IV, but not Sema III. Although they interact with distinct but overlapping subsets of semaphorins, NP-1 and NP-2 exhibit unique expression patterns during nervous system development. Moreover, NP-1 and NP-2 can form homooligomers which can, in turn, form heterooligomers. Thus, their interactions and differential patterns of expression implicate NP-1 and NP-2 in the coordination of axon guidance during neurodevelopment.



Western blot analysis of Neuropilin-2 on a rat cerebrum lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-rat Neuropilin-2 antibody.

Preparation and Storage

Store undiluted at -20° C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes**Application**

Western blot	Routinely Tested
Immunofluorescence	Not Recommended

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Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611463	Rat Cerebrum Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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