

## Product Datasheet

# Neuropilin 1 Mouse Monoclonal Antibody (orb1145780)

<b>Catalog Number</b>	orb1145780
<b>Category</b>	Antibodies
<b>Description</b>	Anti-Neuropilin 1 Antibody (monoclonal, 4G3F7). Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Rat.
<b>Target</b>	Neuropilin-1
<b>Clonality</b>	Monoclonal
<b>Species/Host</b>	Mouse
<b>Isotype</b>	Mouse IgG2b
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human, Rat
<b>Form/Appearance</b>	Lyophilized
<b>Concentration</b>	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
<b>Buffer/Preservatives</b>	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
<b>Reconstitution</b>	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
<b>Purification</b>	Immunogen affinity purified.
<b>Immunogen</b>	E.coli-derived human Neuropilin 1 recombinant protein (Position: K504-T827). Human Neuropilin 1 shares 95% and 94% amino acid (aa) sequences identity with mouse and rat Neuropilin 1, respectively.

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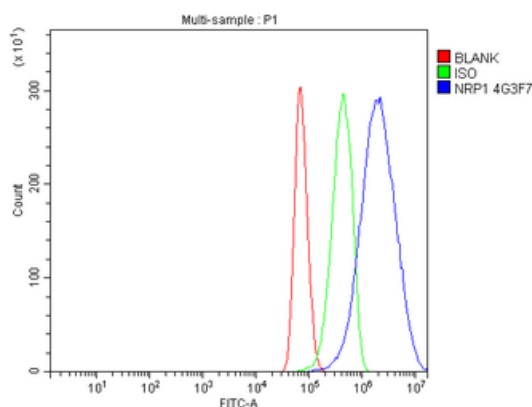
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<b>UniProt ID</b>	<b>O14786</b>
<b>MW</b>	120 kDa
<b>Tested applications</b>	FC, ICC, IF, WB
<b>Dilution range</b>	Western blot, 0.25-0.5 µg/ml, Human, Rat Immunocytochemistry/Immunofluorescence, 5 µg/ml, Human Flow Cytometry (Fixed), 1-3 µg/1x10 <sup>6</sup> cells, Human
<b>Cross Reactivity</b>	No cross-reactivity with other proteins.
<b>Antibody Type</b>	Primary Antibody
<b>Clone Number</b>	4G3F7
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.



Flow Cytometry analysis of U87 cells using anti-Neuropilin 1 antibody. Overlay histogram showing U87 cells (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Neuropilin 1 Antibody (1 µg/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (5-10 µg/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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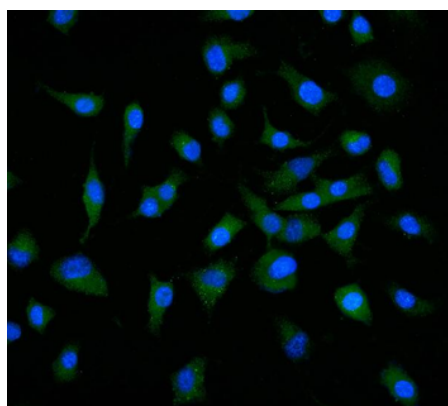
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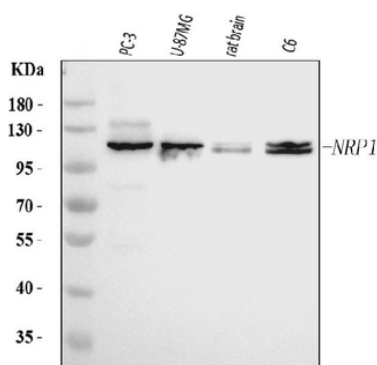
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IF analysis of Neuropilin 1 using anti-Neuropilin 1 antibody. Neuropilin 1 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 µg/mL mouse anti-Neuropilin 1 Antibody overnight at 4°C. DyLight®488 Conjugated Goat Anti-mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of Neuropilin 1 using anti-Neuropilin 1 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human PC-3 whole cell lysates, Lane 2: human U-87MG whole cell lysates, Lane 3: rat brain tissue lysates, Lane 4: rat C6 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Neuropilin 1 antigen affinity purified monoclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Neuropilin 1 at approximately 120 kDa. The expected band size for Neuropilin 1 is at 120 kDa.

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