



20150218ML

# Anti-Mouse Trk-C (#6G17)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>103-M198</b>
Size:	100 µg
Lot. No.:	According to product label

**Preparation:** This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat) immunized with purified recombinant mouse TrkC extracellular domain.

## Target Background

<b>Synonyms (Target):</b>	Ntrk3; TrkC; AW125844; Ntrk3_tv3
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The neurotrophins, including NGF, BDNF, NT3 and NT4/5, constitute a group of structurally related, secreted proteins that play an important role in the development and function of the nervous system. The biological activities of the neurotrophins are mediated by binding to and activating two unrelated receptor types: the p75 neurotrophin receptor (p75NTR) and the Trk family of receptor tyrosine kinases. p75NTR is a member of the tumor necrosis factor receptor superfamily (TNFRSF) and has been designated TNFRSF16. It binds all neurotrophins with low affinity to transduce cellular signaling pathways that synergize or antagonize those activated by the Trk receptors. Three Trk family proteins, TrkA, TrkB, and TrkC, exhibiting different ligand specificities, have been identified. TrkA binds NGF and NT3, TrkB binds BDNF, NT3 and NT4/5, and TrkC only binds NT3. All Trk family proteins share a conserved, complex subdomain organization consisting of a signal peptide, two cysteine-rich domains, a cluster of three leucine-rich motifs, and two immunoglobulinlike domains in the extracellular region, as well as an intracellular region that contains the tyrosine kinase domain. Natural splice variants of the different Trks, lacking the first cysteine-rich domain, the first and second or all three of the leucine-rich motifs, or the tyrosine kinase domain, have been described. At the protein sequence level, Trks are highly conserved between species with the extracellular domains of human and mouse TrkC showing 94% amino acid sequence identity. The proteins also exhibit cross-species activity. The primary location of TrkC expression is in the nervous system and, specifically, in regions of the CNS. Low level TrkC expression has also been observed in a wide variety of tissues outside the nervous system.

## Database References Target

<b>Protein RefSeq:</b>	NP_032772
<b>Uniprot ID:</b>	Q6VNS1
<b>mRNA RefSeq:</b>	NM_008746

## Product Specifications

<b>Host</b>	Rat
<b>Reactivity against</b>	Mouse
<b>Clonality</b>	Monoclonal Antibody
<b>Clone</b>	(#6G17)
<b>Isotype</b>	IgG1
<b>Purification</b>	Protein G chromatography
<b>Antigen</b>	recombinant Mouse Trk-C extracellular domain
<b>Formulation</b>	lyophilized
<b>Reconstitution buffer</b>	PBS (sterile)

**Reconstitution:** Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

**Stability:** Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

**Remarks:** This antibody recognizes mouse TrkC in western blot. It has no crossreactivity with mouse TrkB. Cross reactivity to TrkC of other species has not been tested!

**AVOID REPEATED FREEZE AND THAW CYCLES!**

## Applications

The antibody can be used within the following applications:

WB, IHC (P)

**Recommended usage:**

Western Blot: 1:100 - 1:1000

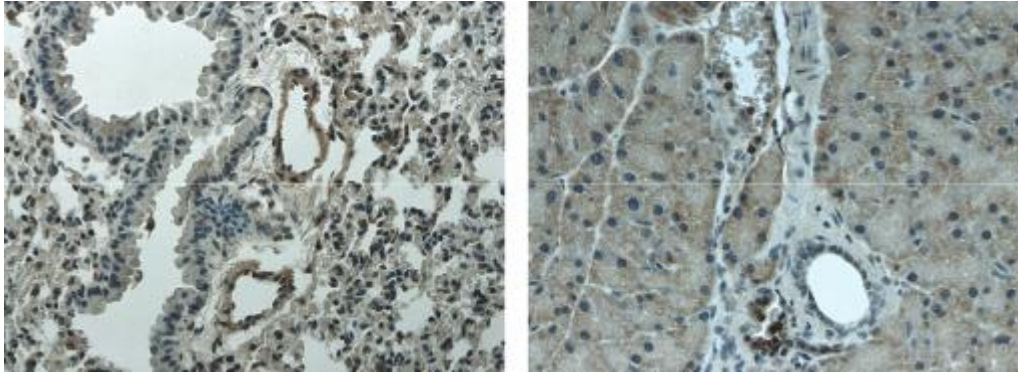
**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**



## **Anti-Mouse Trk-C (#6G17)**

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### **Application/Handling**



Trkc immunohistochemistry staining of paraffin sections of mouse lung and pancreas tissues from LPS exposed animals.