

Product datasheet

Anti-TrkA (phospho Y496) antibody ab111606

1 图像

概述

产品名称	Anti-TrkA (phospho Y496)抗体
描述	兔多克隆抗体 to TrkA (phospho Y496)
宿主	Rabbit
特异性	ab111606 detects endogenous levels of TrkA only when phosphorylated at tyrosine 496.
经测试应用	适用于: ICC/IF
种属反应性	与反应: Human 预测可用于: Mouse, Rat 
免疫原	Synthetic phosphopeptide derived from Human TrkA around the phosphorylation site of tyrosine 496 (P-Q-Y <sup>P</sup> -F-S).
阳性对照	NIH3T3 cells.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol, 0.88% Sodium chloride Note: PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> )
纯度	Immunogen affinity purified
纯化说明	ab111606 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
克隆	多克隆
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab111606** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

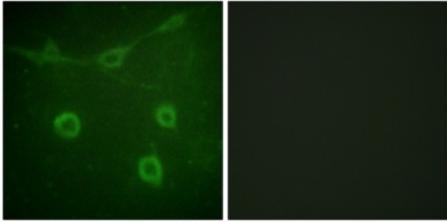
应用	Ab评论	说明
ICC/IF		1/100 - 1/500.

## 靶标

<b>功能</b>	<p>Receptor tyrosine kinase involved in the development and the maturation of the central and peripheral nervous systems through regulation of proliferation, differentiation and survival of sympathetic and nervous neurons. High affinity receptor for NGF which is its primary ligand, it can also bind and be activated by NTF3/neurotrophin-3. However, NTF3 only supports axonal extension through NTRK1 but has no effect on neuron survival. Upon dimeric NGF ligand-binding, undergoes homodimerization, autophosphorylation and activation. Recruits, phosphorylates and/or activates several downstream effectors including SHC1, FRS2, SH2B1, SH2B2 and PLCG1 that regulate distinct overlapping signaling cascades driving cell survival and differentiation. Through SHC1 and FRS2 activates a GRB2-Ras-MAPK cascade that regulates cell differentiation and survival. Through PLCG1 controls NF-Kappa-B activation and the transcription of genes involved in cell survival. Through SHC1 and SH2B1 controls a Ras-PI3 kinase-AKT1 signaling cascade that is also regulating survival. In absence of ligand and activation, may promote cell death, making the survival of neurons dependent on trophic factors. Isoform TrkA-III is resistant to NGF, constitutively activates AKT1 and NF-kappa-B and is unable to activate the Ras-MAPK signaling cascade. Antagonizes the anti-proliferative NGF-NTRK1 signaling that promotes neuronal precursors differentiation. Isoform TrkA-III promotes angiogenesis and has oncogenic activity when overexpressed.</p>
<b>组织特异性</b>	<p>Isoform TrkA-I is found in most non-neuronal tissues. Isoform TrkA-II is primarily expressed in neuronal cells. TrkA-III is specifically expressed by pluripotent neural stem and neural crest progenitors.</p>
<b>疾病相关</b>	<p>Congenital insensitivity to pain with anhidrosis  Chromosomal aberrations involving NTRK1 are found in papillary thyroid carcinomas (PTCs) (PubMed:2869410, PubMed:7565764, PubMed:1532241). Translocation t(1;3)(q21;q11) with TFG generates the TRKT3 (TRK-T3) transcript by fusing TFG to the 3'-end of NTRK1 (PubMed:7565764). A rearrangement with TPM3 generates the TRK transcript by fusing TPM3 to the 3'-end of NTRK1 (PubMed:2869410). An intrachromosomal rearrangement that links the protein kinase domain of NTRK1 to the 5'-end of the TPR gene forms the fusion protein TRK-T1. TRK-T1 is a 55 kDa protein reacting with antibodies against the C-terminus of the NTRK1 protein (PubMed:1532241).</p>
<b>序列相似性</b>	<p>Belongs to the protein kinase superfamily. Tyr protein kinase family. Insulin receptor subfamily. Contains 2 Ig-like C2-type (immunoglobulin-like) domains. Contains 2 LRR (leucine-rich) repeats. Contains 1 LRRCT domain. Contains 1 protein kinase domain.</p>
<b>结构域</b>	<p>The transmembrane domain mediates interaction with KIDINS220. The extracellular domain mediates interaction with NGFR.</p>
<b>翻译后修饰</b>	<p>Ligand-mediated autophosphorylation. Interaction with SQSTM1 is phosphotyrosine-dependent. Autophosphorylation at Tyr-496 mediates interaction and phosphorylation of SHC1. N-glycosylated (Probable). Isoform TrkA-I is N-glycosylated. Ubiquitinated. Undergoes polyubiquitination upon activation; regulated by NGFR. Ubiquitination regulates the internalization of the receptor.</p>
<b>细胞定位</b>	<p>Cell membrane. Early endosome membrane. Late endosome membrane. Internalized to</p>

endosomes upon binding of NGF or NTF3 and further transported to the cell body via a retrograde axonal transport. Localized at cell membrane and early endosomes before nerve growth factor (NGF) stimulation. Recruited to late endosomes after NGF stimulation. Colocalized with RAPGEF2 at late endosomes (By similarity).

## 图片



ab111606 at 1/100 dilution staining TrkA in NIH3T3 cells by Immunofluorescence. The picture on the right is treated with the synthesized phosphopeptide.

Immunocytochemistry/ Immunofluorescence - Anti-TrkA (phospho Y496) antibody (ab111606)

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