

## OriGene Technologies Inc.

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### SP1208P

# OriGene EU

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## Polyclonal Antibody to Trk - Purified

Catalog No.: SP1208P

Quantity: 0.1 mg

Concentration: 0.1 mg/ml

Background: The trk proto-oncogene encodes a 140-kilodalton, membrane-spanning protein Trk that is expressed only in neural tissues. Nerve growth factor (NGF) stimulates phosphorylation of

Trk in neural cell lines and in embryonic dorsal root ganglia. Affinity cross-linking and equilibrium binding experiments indicate that Trk binds NGF specifically in cultured cells with a dissociation constant of 10(-9) molar. The identification of Trk as an NGF receptor indicates that this protein participates in the primary signal transduction mechanism of NGF. Nerve growth factor and its high-affinity receptor Trk are thought to be involved in the progression of various cancers. NGF interacts with two different low-affinity receptors that can be distinguished by affinity crosslinking. Reconstitution experiments by membrane fusion and transient transfection into heterologous cells indicate that high-affinity NGF binding requires coexpression and binding to both the low-affinity NGF receptor and Trk. These studies reveal a new growth factor receptor-mediated mechanism of cellular

differentiation involving Trk and the low-affinity NGF receptor.

**Host:** Rabbit

Immunogen: Synthetic peptide selected from the C-terminal catalytic domain of the human trk proto-

oncogene amino acid sequence.

AA Sequence:

(Cys)-Ala-Leu-Ala-Gln-Ala-Pro-Pro-Val-Tyr-Leu-Asp-Val-Leu-Gly

**Format:** State: Liquid purified IgG fraction with 0.09% Sodium Azide as preservative.

**Purification:** Affinity Chromatography on Protein A..

**Applications:** Western Blot (1/200).

Immunoprecipitation.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: This antibody recognises both the Trk proto-oncogene and oncogene product (140kD and

70kD proteins respectively).

Species: Human.

Other species not tested.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Martin-Zanca D, Oskam R, Mitra G, Copeland T, Barbacid M. Molecular and biochemical

characterization of the human trk proto-oncogene. Mol Cell Biol. 1989 Jan;9(1):24-33.

PubMed PMID: 2927393.



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