

**Datasheet for KOA0509****Rat TrkA ELISA Kit****Overview**

<b>Description:</b>	Rat TrkA AccuSignal ELISA Kit - KOA0509
<b>Item No.:</b>	KOA0509
<b>Size:</b>	1 Kit
<b>Applications:</b>	ELISA
<b>Reactivity:</b>	Rat
<b>Range:</b>	156 pg/ml - 10000 pg/ml

**Product Details**

<b>Background:</b>	Tropomyosin receptor kinase A(TrkA) are efficacious in attenuating skeletal pain.1 TrkA mutants were able to activate signaling cascades and were even more efficient in promoting neurite outgrowth than the wild-type receptor.2 TrkA is part of a sub-family of protein kinases which includes TrkB and TrkC. Also, there are other neurotrophic factors structurally related to NGF: BDNF(for Brain-Derived Neurotrophic Factor), NT-3(for Neurotrophin-3) and NT-4(for Neurotrophin-4). While TrkA mediates the effects of NGF, TrkB is bound and activated by BDNF, NT-4, and NT-3. Further, TrkC binds and is activated by NT-3.3 TrkA receptor was found in keratoconus-affected corneas, along with an increased level of repressor isoform of Sp3 transcription factor.4 The standard product used in this kit is extracellular part(A33-P418) of recombinant rat TRKA, consisting of 386 amino acids with the molecular weight of 69KDa.
<b>Synonyms:</b>	High affinity nerve growth factor receptor, MTC, Neurotrophic tyrosine kinase receptor type 1, NTRK1, NTRK1_HUMAN, Oncogene TRK, p140-TrkA, TRK, Trk-A, TRK1, TRK1-transforming tyrosine kinase protein
<b>Detection Kit Type:</b>	ELISA Kit
<b>Detection Range:</b>	156 pg/ml - 10000 pg/ml
<b>Sensitivity:</b>	<10 pg/ml

**Target Details**

<b>Gene Name:</b>	NTRK1
<b>Reactivity:</b>	Rat

<b>Immunogen:</b>	Expression system for standard: NSO; Immunogen sequence: A33-P418
<b>Purity/Specificity:</b>	Natural and recombinant rat TrkA. There is no detectable cross-reactivity with other relevant proteins.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P35739</a></li><li>• <a href="#">NCBI - NP_067600.1</a></li><li>• <a href="#">GenelD - 59109</a></li><li>• <a href="#">KOA0509 Protocol</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA
<b>Application Note:</b>	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 10000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312pg/ml, 156pg/ml rat TrkA standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates, cell lysates or tissue lysates to each empty well. It is recommended that each rat TrkA standard solution and each sample be measured in duplicate.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>Other:</b>	DOE: 2-8° C - 03/03/2020 -20° C - 09/01/2020

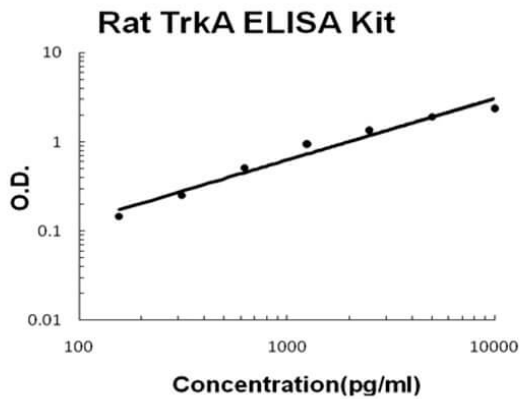
## Formulation

<b>Concentration:</b>	1 Kit
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## Shipping & Handling

<b>Shipping Condition:</b>	Wet Ice
<b>Storage Condition:</b>	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.
<b>Expiration:</b>	See kit insert for complete instructions.

## Images



### ELISA

Rat TrkA AccuSignal ELISA Kit standard curve. Assay Range: 156pg/ml-10000pg/ml. Sensitivity: <10pg/ml.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.