

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human PHOX2B in direct ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PHOX2B Met1-Glu94 Accession # Q99453
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Immunocytochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

PHOX2B (Paired mesoderm homeobox protein 2B; also NBPhox) is a 33-35 kDa member of the paired homeobox family of transcription factors. It is not actually a mesoderm-associated protein, but is instead apparently restricted to neuronal precursors and mature neurons. It is found in glutamatergic neurons of the NTS and in neurons that demarcate the respiratory chemoreception pathway. In addition, PHOX2B is essential to the development of noradrenergic adrenal chromaffin and sympathetic motor neurons. Human PHOX2B is 314 amino acids (aa) in length. It contains one DNA binding homeobox domain (aa 98-157), and two poly-Ala sequences, one between aa 159-167, and another between aa 241-260. Alanine extensions involving anywhere from 5 to 11 Ala residues may exist. These change the nature of the PHOX2B molecule. While wild-type PHOX2B is nuclear, Ala extensions promote its retention in the cytoplasm with loss of activity. PHOX2B may potentially form oligomers with itself, or its paralogue, PHOX2A. Human and mouse PHOX2B are identical in aa sequence.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.