

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 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

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