

PRODUCT INFORMATION

Product name : PHOX2B antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to PHOX2B

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : PHOX2B

Gene Name : paired-like homeobox 2b

Ensembl ID : ENSG00000109132

Entrez GeneID : 8929

GenBank Accession number : D82344

Omim ID : 603851

Swiss-Prot : Q99453

Molecular weight of PHOX2B : 31.6kDa

Function : Involved in the development of several major noradrenergic neuron populations, including the locus coeruleus. Transcription factor which could determine a neurotransmitter phenotype in vertebrates. Enhances second-messenger-mediated activation of the dopamine beta-hydroxylase and c-fos promoters, and of several enhancers including cAMP-response element and serum-response element.

Expected subcellular localization : Nucleus.

Summary : The DNA-associated protein encoded by this gene is a member of the paired family of homeobox proteins localized to the nucleus. The protein functions as a transcription factor involved in the development of several major noradrenergic neuron populations and the determination of neurotransmitter phenotype. The gene product is linked to enhancement of second messenger-mediated activation of the dopamine beta-hydroxylase, c-fos promoters and several enhancers, including cyclic amp-response element and serum-response element [provided by RefSeq].

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/25000 is determined. Appropriate specificity controls were run.
- **WB:** 1/5000.
- **IF:** 1/500.

Optimal dilutions/concentration should be determined by the end user.

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Purified Antibody

Storage buffer : 0.5 X PBS containing a final concentration of 50% Glycerol, 0.1% BSA and 0.01% Thimerosal.

Form : Liquid

Storage instruction : Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

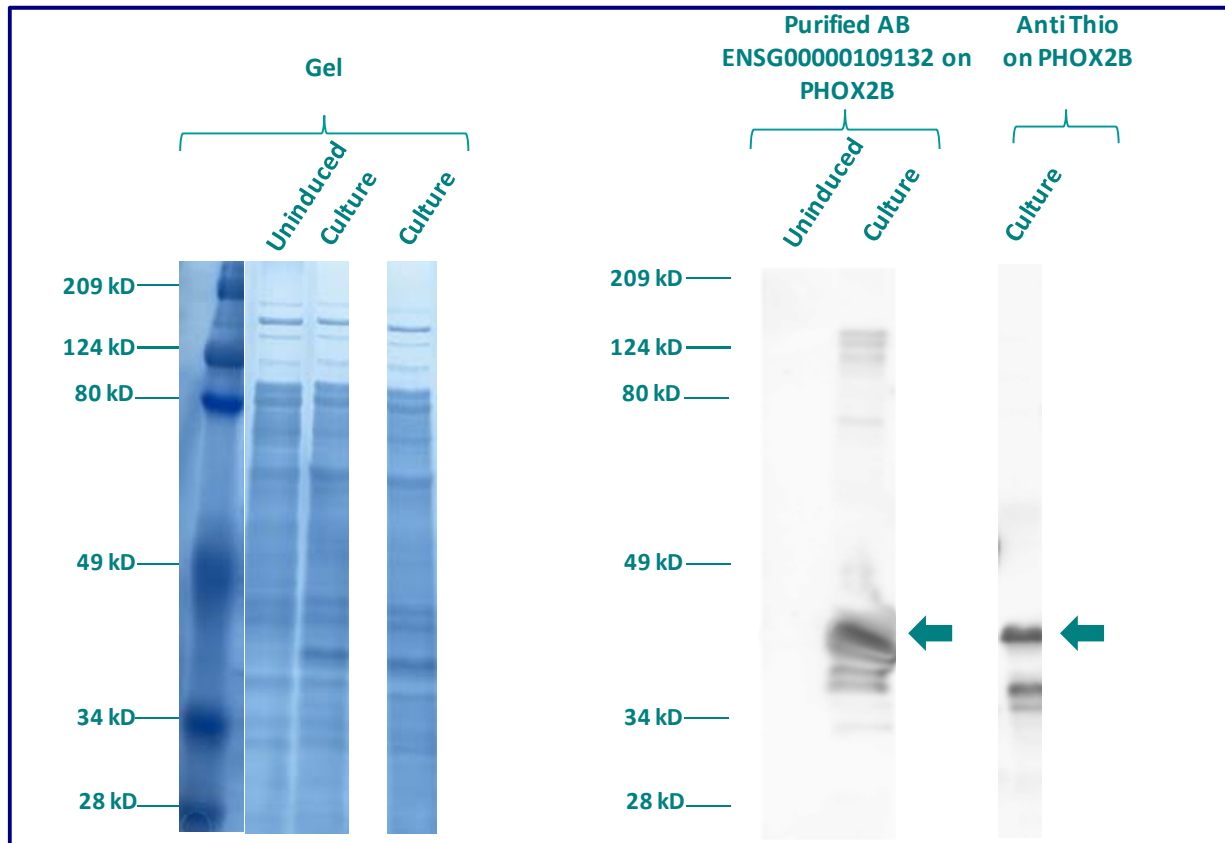
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000109132 has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

An anti-Thio (positive control) has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Plasmid name : pBAD-DEST49.

Molecular weight of PHOX2B : 45.6kDa (31.6kDa + another 14kDa for the tag).



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000109132 at 1: 5000
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2nd Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000
- 60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Paired mesoderm homeobox protein 2B (PHOX2B) expression in 6 cells lines (HELA, 293T/17, Capan-2, SAOS-2, SH-SY5Y, Skin 3.44). The purified Antibody ENSG00000109132 has been tested at 1/500.

Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- PHOX2B antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Expressed in neuroblastoma, brain and adrenal gland

