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PHOX2B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11341C

Product Information

Application	WB, IF, E
Primary Accession	Q99453
Other Accession	O35690, Q62782, Q62066, O14813, NP_003915.2
Reactivity	Mouse
Predicted	Human, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28842
Calculated MW	31621
Antigen Region	104-130

Additional Information

Gene ID	8929
Other Names	Paired mesoderm homeobox protein 2B, Neuroblastoma Phox, NBPhox, PHOX2B homeodomain protein, Paired-like homeobox 2B, PHOX2B, PMX2B
Target/Specificity	This PHOX2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 104-130 amino acids from the Central region of human PHOX2B.
Dilution	WB~~1:1000 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PHOX2B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PHOX2B
Synonyms	PMX2B

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- hydrolase and c-fos promoters, and of several enhancers including cAMP- response element and serum-response element.
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108}.
Tissue Location	Expressed in neuroblastoma, brain and adrenal gland

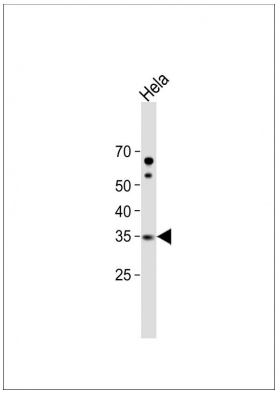
Background

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-hydroylase, c-fos promoters and several enhancers, including cyclic amp-response element and serum-response element. [provided by RefSeq].

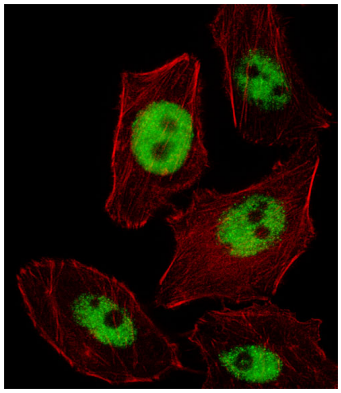
References

Rudzinski, E., et al. Pediatr. Dev. Pathol. 13(4):291-299(2010)
Janoueix-Lerosey, I., et al. Oncogene 29(11):1566-1579(2010)
Tu, E., et al. Hum. Pathol. 41(3):392-400(2010)
Arai, H., et al. J. Hum. Genet. 55(1):4-7(2010)
Dubreuil, V., et al. J. Neurosci. 29(47):14836-14846(2009)

Images



All lanes: Anti-PHOX2B Antibody (Center) at 1:250 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 32 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



Fluorescent image of U251 cell stained with PHOX2B Antibody (Center)(Cat#AP11341c).U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with PHOX2B primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).PHOX2B immunoreactivity is localized to Nucleus significantly.

Citations

- The homeodomain transcription factor Phox2 in the stellate ganglion of the squid Loligo pealei.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.