

PHOX2B (Clone EP312)

Rabbit Monoclonal Antibody

Specificity: Human

Immunogen: Synthetic peptide within Human PHOX2B aa 250 to the C-terminus

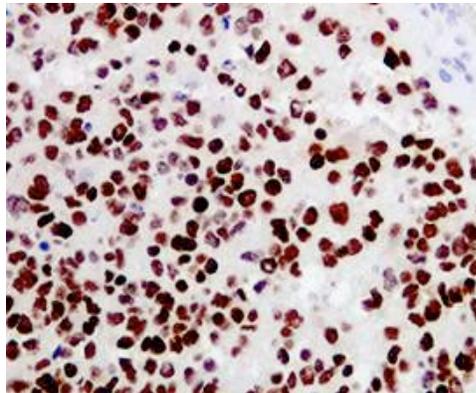
Ig Class: Rabbit IgG

Storage: Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

Staining procedures: Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50-100; *Positive Control:* Neuroblastoma. *Cellular Localization:* Nuclear. *Intended Use:* In vitro diagnosis (IVD).

Description: PHOX2B (Paired mesoderm homeobox protein 2B) is an essential transcription factor determinant of neuronal fate from neural crest precursors. Mutations in PHOX2B have been associated with the development of disease such as congenital central hypoventilation syndrome, Hirschsprung disease and neuroblastoma. Neuroblastoma is the most common malignant pediatric extra-cranial tumor of the sympathetic nervous system. It is a heterogenous group of tumors histologically ranging from undifferentiated or poorly differentiated neuroblasts to predominantly full differentiated neurons. Compared to normal tissues, PHOX2B was found overexpressed in neuroblastoma and cell lines. Often in undifferentiated and poorly differentiated neuroblastomas, immunohistochemistry is required to confirm neuroblastic lineage. IHC studies have demonstrated PHOX2B expression in all neuroblastoma, and have suggested that PHOX2B is a potential marker for diagnosing undifferentiated neuroblastoma. Supplemental studies containing a panel of antibodies can differentiate neuroblastoma from other small-blue-round cell tumors such as Ewing's sarcoma and Wilms' tumor.

Supplied As: Purified antibody with 0.2% BSA and 15mM sodium azide.



Formalin-fixed, paraffin-embedded human neuroblastoma stained with anti-PHOX2B antibody using peroxidase-conjugate and DAB chromogen. Note nuclear staining of tumor cells

Cat #: Z2313 (1.0 ml)