

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human HOXB1 in direct ELISAs. In direct ELISAs, less than 2% cross-reactivity with recombinant human (rh) HOXA1, rhHOXB4, and rhHOXA9 is observed.                                                                                                                  |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human HOXB1<br>Met1-Thr192<br>Accession # P14653                                                                                                                                                                                        |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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

HOXB1 (Homeobox protein B1; also HOX-2l) is a 32 kDa (predicted) member of the Antp homeobox family, labial subfamily of transcription factors. It is expressed in rhombomere-4 (r-4) of the hindbrain, where it drives the development of r-4 derived structures. Among these are the motor neurons of the facial nerve, and neural crest cells that form Schwann cells plus cartilage and bone of the neck and ear. Human HOXB1 is 301 amino acids (aa) in length. It contains an Antp-type hexapeptide (aa 179-184) that mediates heterodimerization, and a DNA-binding homeobox domain (aa 203-262). There is one potential splice variant that shows a 40 aa substitution for aa 193-301. Over aa 1-192, human HOXB1 shares 82% aa identity with mouse HOXB1.

## PRODUCT SPECIFIC NOTICES

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