

PRODUCT INFORMATION

Product name : HOXB8 antibody

Product type : Primary antibodies

Description : Mouse monoclonal to HOXB8

Immunogen : 1 synthetic peptide (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA, WB & IF

GENE INFORMATION

Gene Symbol : HOXB8

Gene Name : homeobox B8

Ensembl ID : ENSG00000120068

Entrez GeneID : 3218

Swiss-Prot : P17481

Molecular weight : 27.8kDa

Function : Sequence-specific transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis.

Expected subcellular localization : Nucleus.

Summary : This gene is a member of the Antp homeobox family and encodes a nuclear protein with a homeobox DNA-binding domain. It is included in a cluster of homeobox B genes located on chromosome 17. The encoded protein functions as a sequence-specific transcription factor that is involved in development. Increased expression of this gene is associated with colorectal cancer. Mice that have had the murine ortholog of this gene knocked out exhibit an excessive pathologic grooming behavior. This behavior is similar to the behavior of humans suffering from the obsessive-compulsive spectrum disorder trichotillomania. [provided by RefSeq, Jul 2008].

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 1 immunogen peptide. A titer of 130000 has been determined. Appropriate specificity controls were run.
- **WB:** Dilution 1/5000
- **IF:** Dilution 1/500

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

Raised in : Mouse

Clonality : Monoclonal

Isotype : IgG

Purity : Purified Antibody

Concentration: 2mg/ml

Storage buffer : Containing a final concentration of PBS/glycerol (V/V), 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

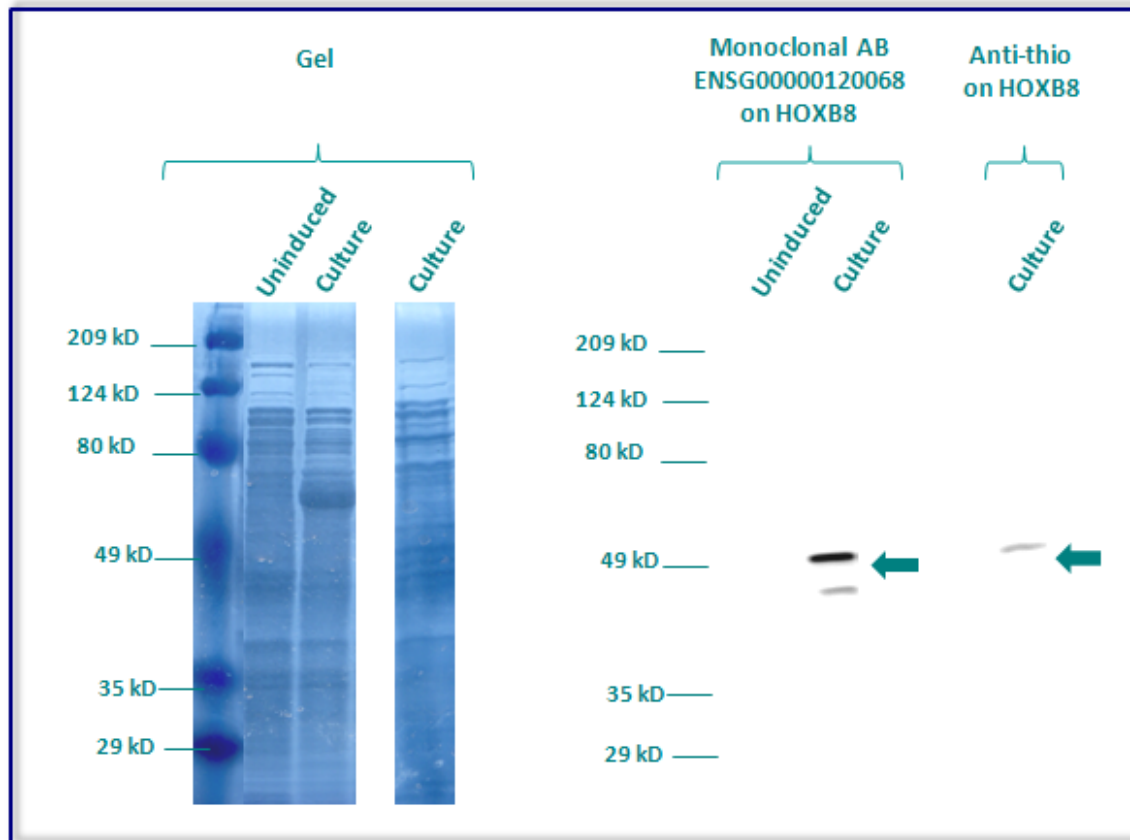
The monoclonal purified antibody ENSG00000120068 has tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

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

Clone : 1D6G6G7, Isotype : G1; kappa

Plasmid name : pBAD-DEST49.

Molecular weight of HOXB8 : 41.5kDa (27.5kDa + 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 ENSG00000120068 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-Mouse IgG HRP conjugated at 1/10000
- 60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

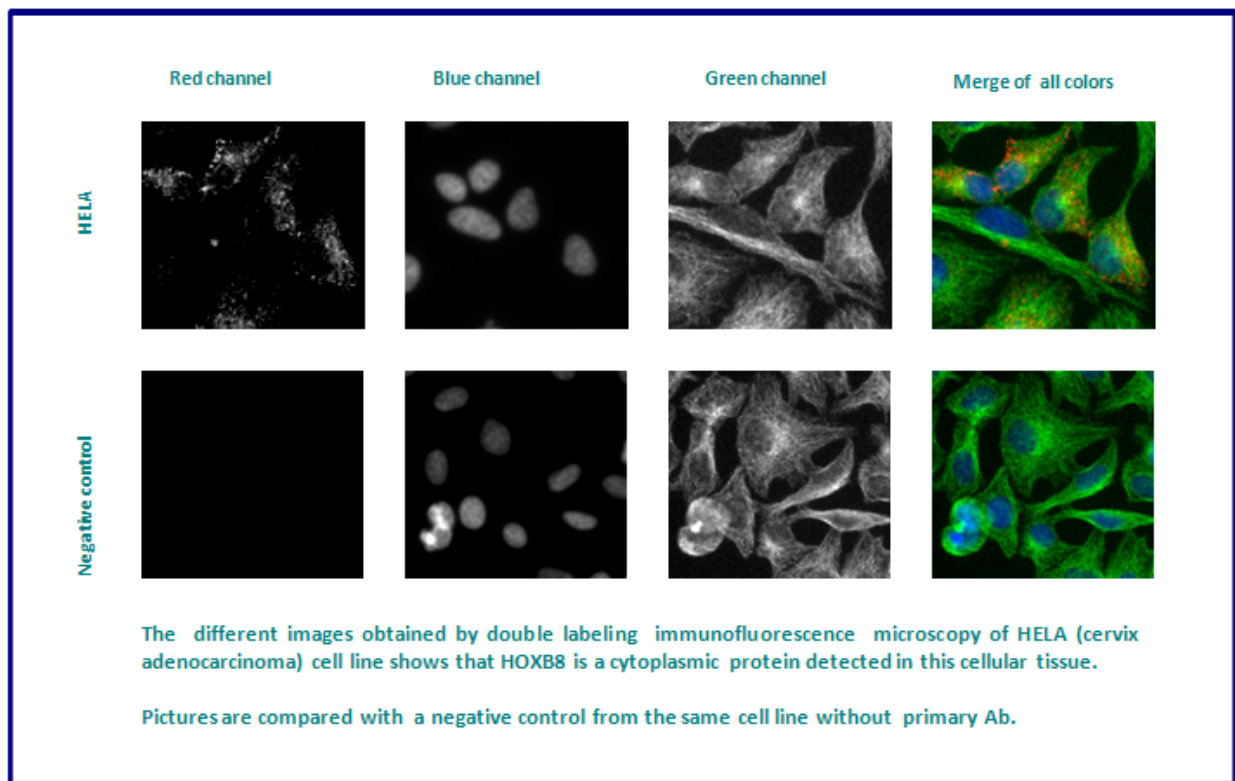
Immunofluorescence analysis of Homeobox protein Hox-B8 (HOXB8) expression in 5 cells lines (HELA, 293T/17, Capan-2, SH-SY5Y, Skin 3,44). The monoclonal antibody ENSG00000120068 has been tested at 1/500.

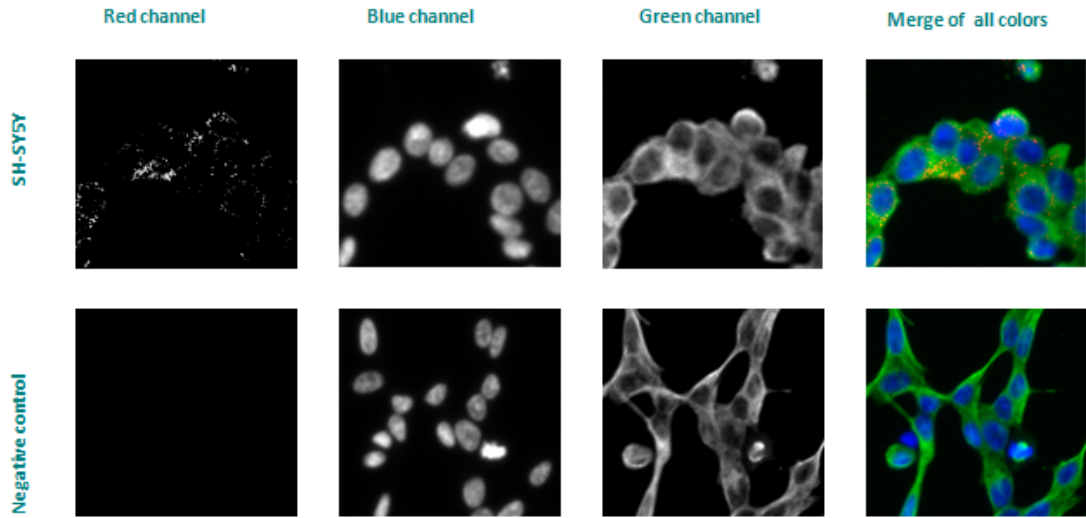
Green staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Red staining : anti- HOXB8 antibody (purified)

Expected subcellular location : Nucleus





The different images obtained by double labeling immunofluorescence microscopy of SH-SY5Y (neuroblastoma) cell line shows that HOXB8 is a cytoplasmic protein detected in this cellular tissue.

Pictures are compared with a negative control from the same cell line without primary Ab.

Remaining cell lines tested gave a positive result with a cytoplasmic distribution.