

PRODUCT INFORMATION

Product name : BHLHE41 antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to BHLHE41

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Hu, Ms

Tested applications : ELISA , WB and IF

GENE INFORMATION

Gene Symbol : BHLHE41 (alternative name BHLHB3)

Gene Name : Class E basic helix-loop-helix protein 41

Ensembl ID : ENSG00000123095

Entrez GeneID : 79365

GenBank Accession number : AB044088.1

Omim ID : 606200

Swiss-Prot : Q9C0J9

Molecular weight of BHLHE41 : 50.498kDa

Function : May be a transcriptional repressor that represses both basal and activated transcription.

Expected subcellular localization : nucleus.

Expected tissue specificity : Highly expressed in skeletal muscle and brain, moderately expressed in pancreas and heart, weakly expressed in placenta, lung, liver and kidney.

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A titer of 1/20000 has been determined. Appropriate specificity controls were run.
- **WB:** 1/5000.
- **IF:** 1/1000

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.

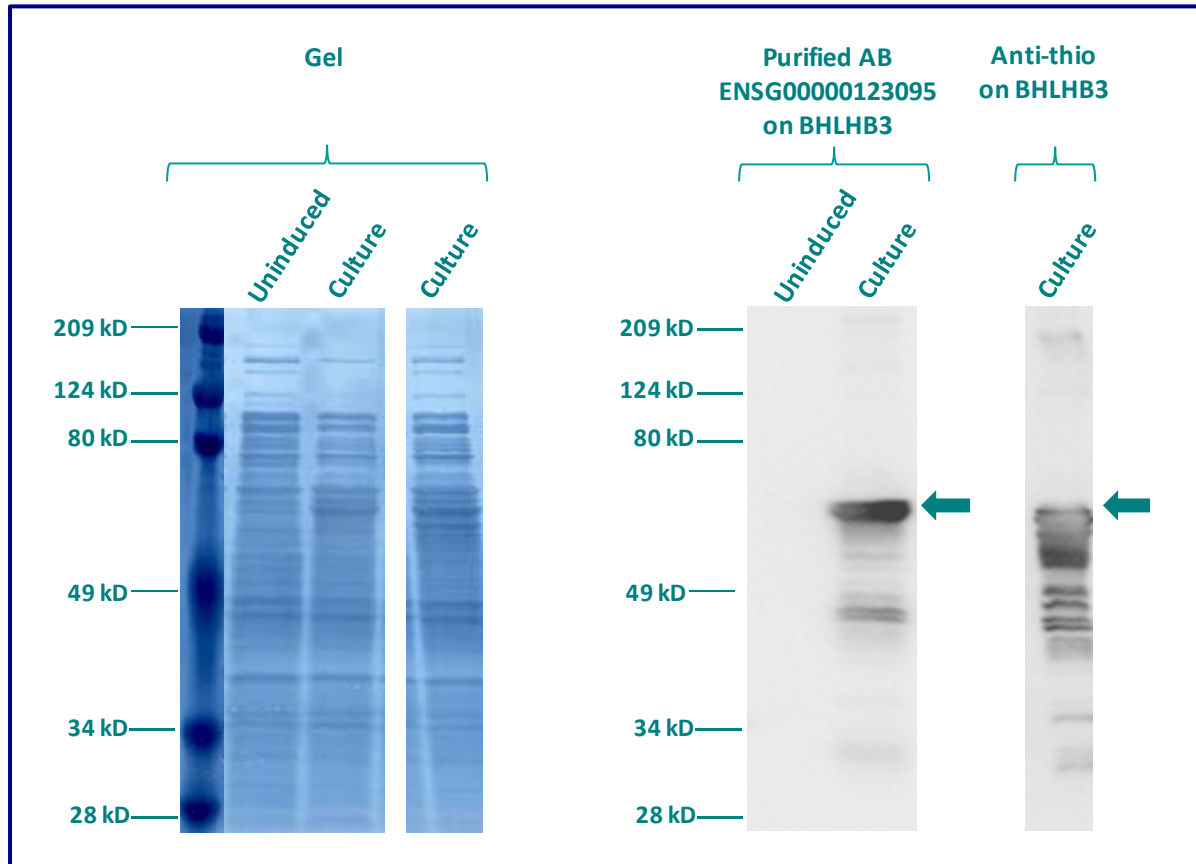
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000123095 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 BHLHB3 : 64.5kDa (50.5kDa + 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 ENSG00000123095 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 Class E basic helix-loop-helix protein 41 (BHLHB3) expression in 5 cells lines (HELA, Capan-2, SAOS-2, SH-SY5Y, Skin 3,44). The purified Antibody ENSG00000123095 has been tested at 1/5000.

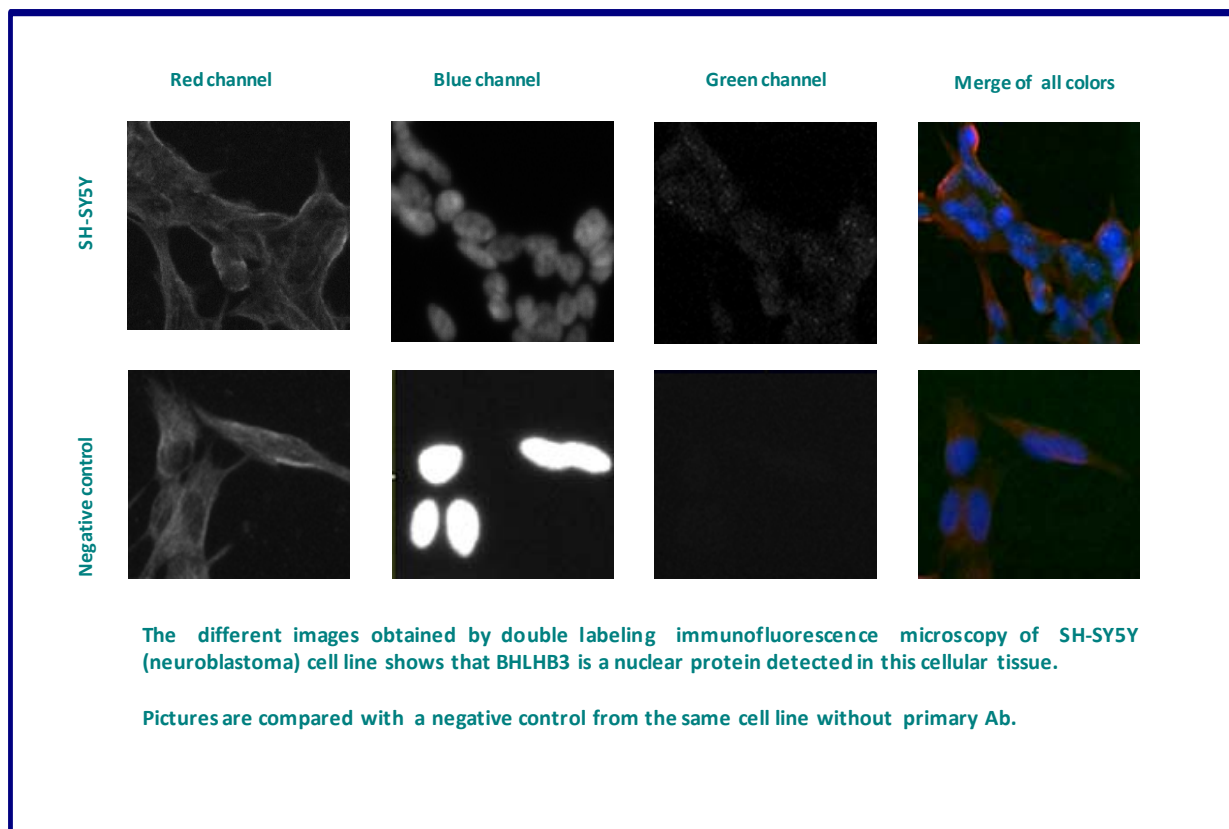
Red staining : cytoskeleton (microtubules/ α -tubuline)

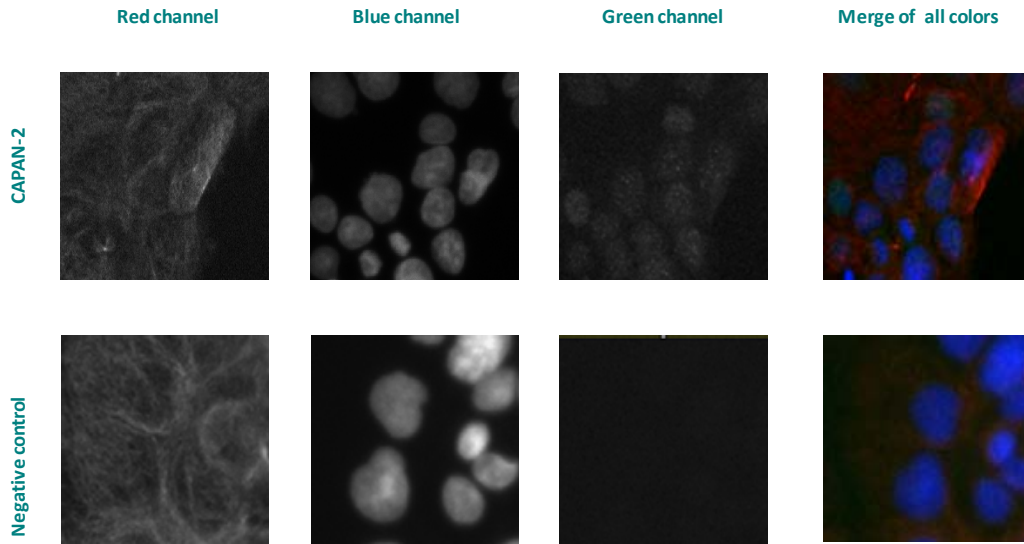
Blue staining : nucleus (Hoechst)

Green staining : anti- BHLHB3 antibody (purified)

Expected subcellular location : Nucleus

Expected tissue specificity : Highly expressed in skeletal muscle and brain, moderately expressed in pancreas and heart, weakly expressed in placenta, lung, liver and kidney.





The different images obtained by double labeling immunofluorescence microscopy of CAPAN- 2 (Pancreas adenocarcinoma) cell line shows that BHLHB3 is a nuclear 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 nuclear distribution.