


Product datasheet

Anti-HIF1 beta antibody [2B10] ab2771

★★★★★ [7 Abreviews](#) [21 References](#) [5 Images](#)

Overview

| | |
|----------------------------|--|
| Product name | Anti-HIF1 beta antibody [2B10] |
| Description | Mouse monoclonal [2B10] to HIF1 beta |
| Host species | Mouse |
| Specificity | Detects aryl hydrocarbon (Ah) receptor nuclear translocator (ARNT). |
| Tested applications | Suitable for: Flow Cyt, WB, ICC/IF, IHC-P, IP |
| Species reactivity | Reacts with: Mouse, Rat, Human, Xenopus laevis, Fish, Non human primates, Zebrafish, African green monkey Predicted to work with: Rabbit, Cow  |
| Immunogen | Synthetic peptide corresponding to Human HIF1 beta aa 771-789. Sequence: NSYNNEEFPDLTMFPPFSE |

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| Storage buffer | Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 99% PBS |
| Purity | Affinity purified |
| Clonality | Monoclonal |
| Clone number | 2B10 |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab2771 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-----------------|-----------|--|
| Flow Cyt | | Use 1 µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |
| WB | ★★★★★ (6) | Use at an assay dependent concentration. |
| EMSA | | Use at an assay dependent concentration. |
| Gel Shift Assay | | Use at an assay dependent concentration. |
| ICC/IF | | 1/1000. |
| IHC-P | | Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |
| IP | ★★★★★ (1) | Use at an assay dependent concentration. |

Target

Function

Required for activity of the Ah (dioxin) receptor. This protein is required for the ligand-binding subunit to translocate from the cytosol to the nucleus after ligand binding. The complex then initiates transcription of genes involved in the activation of PAH procarcinogens. The heterodimer with HIF1A or EPAS1/HIF2A functions as a transcriptional regulator of the adaptive response to hypoxia.

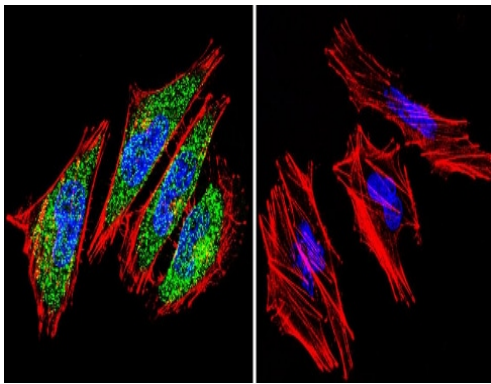
Sequence similarities

Contains 1 basic helix-loop-helix (bHLH) domain.
Contains 1 PAC (PAS-associated C-terminal) domain.
Contains 2 PAS (PER-ARNT-SIM) domains.

Cellular localization

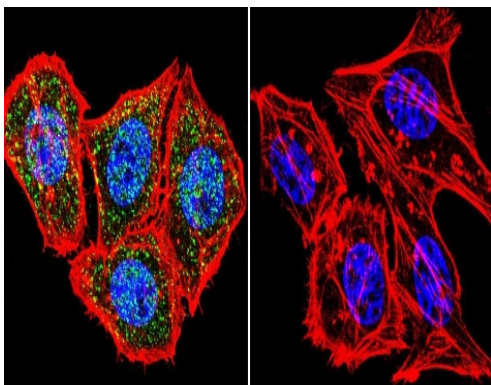
Nucleus.

Images



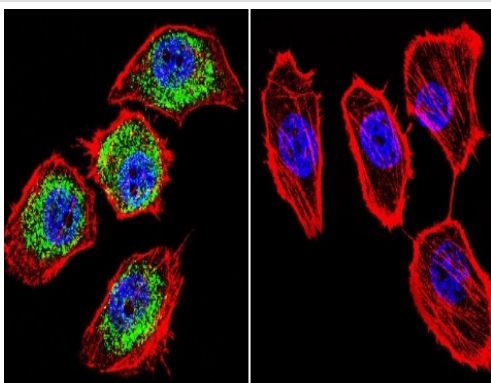
Immunocytochemistry/ Immunofluorescence - Anti-HIF1 beta antibody [2B10] (ab2771)

Immunocytochemistry/Immunofluorescence analysis of HIF1 beta shows staining in A2058 cells. HIF1 beta (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2771 (1:100) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



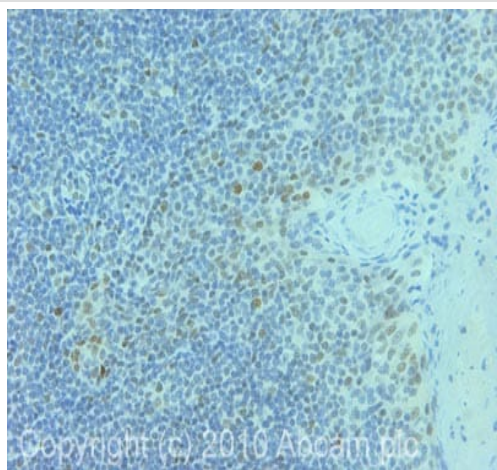
Immunocytochemistry/ Immunofluorescence - Anti-HIF1 beta antibody [2B10] (ab2771)

Immunocytochemistry/Immunofluorescence analysis of HIF1 beta shows staining in HeLa cells. HIF1 beta (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2771 (1:20) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



Immunocytochemistry/ Immunofluorescence - Anti-HIF1 beta antibody [2B10] (ab2771)

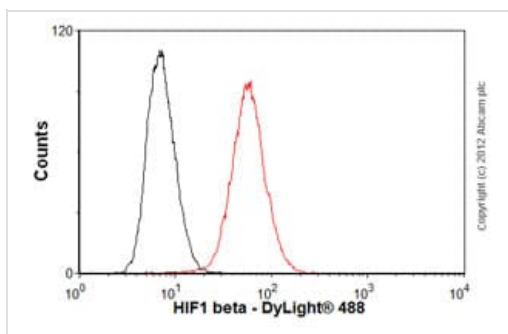
Immunocytochemistry/Immunofluorescence analysis of HIF1 beta shows staining in U251 cells. HIF1 beta (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2771 (1:100) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HIF1 beta antibody [2B10] (ab2771)

IHC image of ab2771 staining in human tonsil formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab2771, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Flow Cytometry - Anti-HIF1 beta antibody [2B10] (ab2771)

Overlay histogram showing PC12 cells stained with ab2771 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab2771, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in PC12 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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