

**ARNT2 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16544c****Specification**

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**ARNT2 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q9HBZ2](#)**ARNT2 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 9915**Other Names**

Aryl hydrocarbon receptor nuclear translocator 2, ARNT protein 2, Class E basic helix-loop-helix protein 1, bHLHe1, ARNT2, BHLHE1, KIAA0307

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ARNT2 Antibody (Center) Blocking Peptide - Protein Information****Name** ARNT2**Synonyms** BHLHE1, KIAA0307**Function**

Transcription factor that plays a role in the development of the hypothalamo-pituitary axis, postnatal brain growth, and visual and renal function (PubMed:&lt;a href="http://www.uniprot.org/citations/24022475" target="\_blank"&gt;24022475&lt;/a&gt;). Specifically recognizes the xenobiotic response element (XRE).

**Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981, ECO:0000269|PubMed:24465693}

**ARNT2 Antibody (Center) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**ARNT2 Antibody (Center) Blocking Peptide - Images****ARNT2 Antibody (Center) Blocking Peptide - Background**

This gene encodes a member of the basic-helix-loop-helix-Per-Arnt-Sim (bHLH-PAS) superfamily of transcription factors. The encoded protein acts as a partner for several sensor proteins of the bHLH-PAS family, forming heterodimers with the sensor proteins that bind regulatory DNA sequences in genes responsive to developmental and environmental stimuli. Under hypoxic conditions, the encoded protein complexes with hypoxia-inducible factor 1 $\alpha$  in the nucleus and this complex binds to hypoxia-responsive elements in enhancers and promoters of oxygen-responsive genes. A highly similar protein in mouse forms functional complexes with both aryl hydrocarbon receptors and Single-minded proteins, suggesting additional roles for the encoded protein in the metabolism of xenobiotic compounds and the regulation of neurogenesis, respectively.

**ARNT2 Antibody (Center) Blocking Peptide - References**

Ramirez, J.M., et al. Eur. J. Immunol. 40(9):2450-2459(2010) Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :Chakrabarti, B., et al. Autism Res 2(3):157-177(2009) Ferreira, M.A., et al. Nat. Genet. 40(9):1056-1058(2008) Martinez, V., et al. Breast Cancer Res. Treat. 110(3):521-530(2008)