



Anti-ARNT2 monoclonal antibody, clone 2C3 (CABT-19230MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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 1alpha 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 addition roles for the encoded protein in the metabolism of xenobiotic compounds and the regulation of neurogenesis, respectively. Mouse monoclonal antibody raised against a partial recombinant ARNT2.
Immunogen	ARNT2 (NP_055677, 464 a.a. ~ 564 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Isotype	lgG2b
Source/Host	Mouse
Species Reactivity	Human
Clone	2C3
Conjugate	Unconjugated
Applications	WB,sELISA,ELISA
Sequence Similarities	VPVPNLPAGVHEAGKSVEKADAIFSQERDPRFAEMFAGISASEKKMMSSASAAGTQQIYS QGSPFPSGHSGKAFSSSVVHVPGVNDIQSSSSTGQNMSQI*

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Size	100 μg
Buffer	In 1x PBS, pH 7.2
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	ARNT2 aryl-hydrocarbon receptor nuclear translocator 2 [Homo sapiens]
Official Symbol	ARNT2
Synonyms	aryl-hydrocarbon receptor nuclear translocator 2; ARNT protein 2; KIAA0307; aryl hydrocarbon receptor nuclear translocator 2; bHLHe1; Class E basic helix-loop-helix protein 1; OTTHUMP00000229925
Entrez Gene ID	9915
Protein Refseq	NP 055677
UniProt ID	<u>Q7Z3A3</u>
Chromosome Location	15q24
Pathway	Pathways in cancer, organism-specific biosystem; Renal cell carcinoma, organism-specific biosystem; Renal cell carcinoma, conserved biosystem
Function	DNA binding; aryl hydrocarbon receptor binding; protein heterodimerization activity; protein heterodimerization activity; sequence-specific DNA binding transcription factor activity; sequence-specific DNA binding transcription factor activity; signal transducer activity