

Datasheet

ARNT monoclonal antibody (M01), clone 3D10

Catalog Number: H00000405-M01

Regulation Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against a partial recombinant ARNT.

Clone Name: 3D10

Immunogen: ARNT (AAH60838, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Sequence:

MAATTANPEMTSDVPSLGPAIASGNSGPGIQGGGAIV
QRAIKRRPGLDFDDDGEGNSKFLRCDDDDQMSNDKER
FARSDDEQSSADKERLARENHSEIERRRRRNKMTAYIT

Host: Mouse

Reactivity: Human

Applications: ELISA, IF, IHC-P, RNAi-Ab, S-ELISA, WB-Ce, WB-Re, WB-Tr
(See our web site product page for detailed applications information)

Protocols: See our web site at
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

Isotype: IgG2a Kappa

Storage Buffer: In 1x PBS, pH 7.4

Storage Instruction: Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 405

Gene Symbol: ARNT

Gene Alias: HIF-1beta, HIF1B, HIF1BETA, TANGO, bHLHe2

Gene Summary: The aryl hydrocarbon (Ah) receptor is involved in the induction of several enzymes that

participate in xenobiotic metabolism. The ligand-free, cytosolic form of the Ah receptor is complexed to heat shock protein 90. Binding of ligand, which includes dioxin and polycyclic aromatic hydrocarbons, results in translocation of the ligand-binding subunit only to the nucleus. Induction of enzymes involved in xenobiotic metabolism occurs through binding of the ligand-bound Ah receptor to xenobiotic responsive elements in the promoters of genes for these enzymes. This gene encodes a protein that forms a complex with the ligand-bound Ah receptor, and is required for receptor function. The encoded protein has also been identified as the beta subunit of a heterodimeric transcription factor, hypoxia-inducible factor 1 (HIF1). A t(1;12)(q21;p13) translocation, which results in a TEL-ARNT fusion protein, is associated with acute myeloblastic leukemia. Three alternatively spliced variants encoding different isoforms have been described for this gene. [provided by RefSeq]