

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ARNT/HIF-1 β in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 775146
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human ARNT/HIF-1 β Asp517-Ala691 Accession # P27540
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

ARNT (Aryl hydrocarbon nuclear translocator; also HIF-1 β , Hypoxia-inducible factor 1-beta) is an 87-97 kDa member of the bHLH-PAS subclass of the bHLH family of transcription factors. It is widely expressed, and serves as part of both the NF κ B and aryl hydrocarbon receptor (AHR) signaling nodes. For the AHR, the AHR is normally inactive and bound to hsp90 in the cytosol. Following ligand binding, the AHR complex enters the nucleus, dissociates from hsp90, dimerizes with ARNT, and then binds response elements of select genes. Human ARNT is 789 amino acids (aa) in length. It contains a DNA-binding region (aa 87-143), two PAS domains (aa 161-235 and 362-458) and one PAC region (aa 424-467). There are multiple potential splice forms. Two alternate start sites are found at Met10 and Met354, there is a deletion of aa 329-755 and 77-91, and an Ala substitution for aa 328-789.

PRODUCT SPECIFIC NOTICES

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