For Research Use Only

ARNT2 Polyclonal antibody

Catalog Number: 12810-1-AP

Featured Product

1 Publications



Basic Information

Catalog Number: 12810-1-AP

GenBank Accession Number: BC036099

Purification Method: Antigen affinity purification

Size

GeneID (NCBI):

Recommended Dilutions:

150ul, Concentration: 260 µg/ml by Nanodrop and 227 μ g/ml by Bradford Full Name:

9915

WB 1:500-1:1000 IHC 1:50-1:500

method using BSA as the standard;

aryl-hydrocarbon receptor nuclear

translocator 2 Calculated MW:

Rabbit Isotype: IgG

716 aa, 79 kDa Observed MW:

Immunogen Catalog Number:

80-85 kDa

AG3536

Applications

Tested Applications:

IHC, WB, ELISA

Cited Applications:

Species Specificity:

human, mouse, rat

Cited Species:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: HEK-293 cells, Jurkat cells, Raji cells

IHC: human gliomas tissue,

Background Information

 $Aryl-hydrocarbon\ receptor\ nuclear\ translocator\ 2 (ARNT2), is\ a\ member\ of\ the\ basic-helix-loop-helix-Per-Arnt-Sim$ (bHLH-PAS) superfamily of transcription factors. It specifically recognizes the xenobiotic response element(XRE). ARNT2 plays an important role in normal glucose handling in pancreatic beta cell function in humans and mice. ARNT2 proteins are dimeric partners for other PAS proteins such as HIF and SIM. ARNT2 and the other ARNT family members, e.g., ARNT, hypoxin inducible factor 1a (HIF1a), HIF2a, and aryl hydrocarbon receptor (AhR), are thought to function as heterodimers, and regulate the expression, and thereby the function, of many genes. Under hypoxic conditions, it complexes with hypoxia-inducible factor 1alpha in the nucleus and this complex binds to hypoxiaresponsive elements in enhancers and promoters of oxygen-responsive genes. Modulation of ARNT2 in pancreatic beta cells affects glucose stimulated INS secretion (GSIS). This antibody is a rabbit polyclonal antibody raised against residues near the C terminus of human ARNT2.

Notable Publications

Author	Pubmed ID	Journal	Application
Zhixiao Sun	33537006	Front Microbiol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

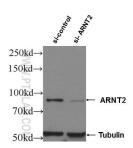
For technical support and original validation data for this product please contact:

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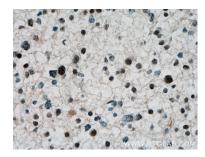
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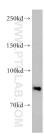
Selected Validation Data



WB result of ARNT2 antibody (12810-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ARNT2 transfected Jurkat cells.



Immunohistochemical analysis of paraffinembedded human gliomas tissue slide using 12810-1-AP (ARNT2 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



HEK-293 cells were subjected to SDS PAGE followed by western blot with 12810-1-AP (ARNT2 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.