Datasheet for ABIN7127344

Recombinant anti-ARNT antibody

3 Images

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Overview

Quantity:	100 µL
Target:	ARNT
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This ARNT antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunoprecipitation (IP)

Product Details

Immunogen:	A synthesized peptide derived from human ARNT
Clone:	2F11
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	ARNT
Alternative Name:	ARNT (ARNT Products)
Background:	Background: Required for activity of the Ah (dioxin) receptor. This protein is required for the

Target Details

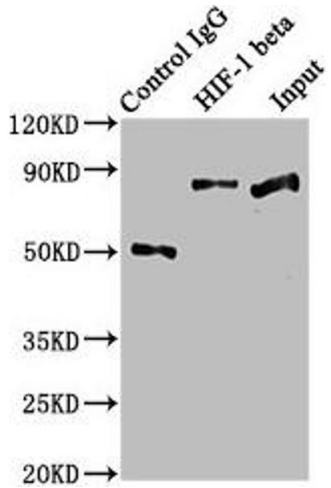
	ligand-binding subunit to translocate from the cytosol to the nucleus after ligand binding. The complex then initiates transcription of genes involved in the activation of PAH procarcinogens. The heterodimer binds to core DNA sequence 5'-TACGTG-3' within the hypoxia response element (HRE) of target gene promoters and functions as a transcriptional regulator of the adaptive response to hypoxia (By similarity). The heterodimer ARNT:AHR binds to core DNA sequence 5'-TGCGTG-3' within the dioxin response element (DRE) of target gene promoters and activates their transcription (PubMed:28396409). Aliases: Aryl hydrocarbon receptor nuclear translocator, ARNT protein, Class E basic helix-loop-helix protein 2, bHLHe2, Dioxin receptor, nuclear translocator, Hypoxia-inducible factor 1-beta, HIF-1-beta, HIF1-beta, ARNT, BHLHE2
UniProt:	P27540
Pathways:	Regulation of Hormone Metabolic Process, Regulation of Hormone Biosynthetic Process, Regulation of Carbohydrate Metabolic Process, Signaling Events mediated by VEGFR1 and VEGFR2, Warburg Effect

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IP:1:200-1:1000,
Restrictions:	For Research Use only

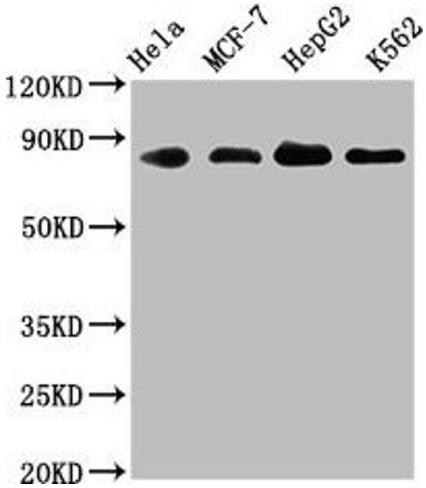
Handling

Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



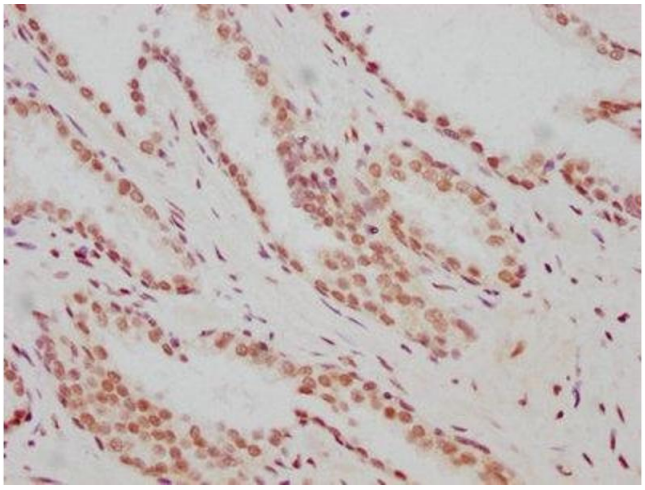
Western Blotting

Image 1. Immunoprecipitating HIF-1 beta in Hela whole cell lysate Lane 1: Rabbit control IgG instead of ABIN7127344 in Hela whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000) Lane 2: ABIN7127344 (3 µg) + Hela whole cell lysate (500 µg) Lane 3: Hela whole cell lysate (20 µg)



Western Blotting

Image 2. Western Blot Positive WB detected in: Hela whole cell lysate, MCF-7 whole cell lysate, HepG2 whole cell lysate, K562 whole cell lysate All lanes: ARNT antibody at 1.83 µ g/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 87, 85, 86 KDa Observed band size: 87 KDa



Immunohistochemistry

Image 3. IHC image of ABIN7127344 diluted at 1:183 and staining in paraffin-embedded human prostate cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.