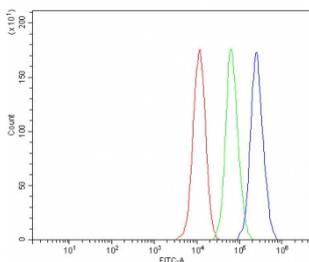


BMAL1 Antibody / Brain and muscle ARNT-like 1 (R32634)

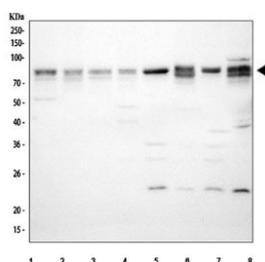
Catalog No.	Formulation	Size
R32634	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O00327
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This BMAL1 antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human MCF7 cells with BMAL1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= BMAL1 antibody.



Western blot testing of 1) human HeLa, 2) human HT-1080, 3) human MCF7, 4) human SH-SY5Y, 5) rat brain, 6) rat liver, 7) mouse brain and 8) mouse liver tissue lysate with BMAL1 antibody. Predicted molecular weight ~69 kDa.

Description

Aryl hydrocarbon receptor nuclear translocator-like protein 1 (ARNTL), also called Brain and muscle ARNT-like 1 (BMAL1), is a protein that in humans is encoded by the ARNTL gene. The protein encoded by this gene is a basic helix-loop-helix protein that forms a heterodimer with CLOCK. This heterodimer binds E-box enhancer elements upstream of Period (PER1, PER2, PER3) and Cryptochrome (CRY1, CRY2) genes and activates transcription of these genes. PER and CRY proteins heterodimerize and repress their own transcription by interacting in a feedback loop with CLOCK/ARNTL complexes. Defects in this gene have been linked to infertility, problems with gluconeogenesis and lipogenesis, and altered sleep patterns. Several transcript variants encoding different isoforms have been found for this gene.

Application Notes

Optimal dilution of the BMAL1 antibody should be determined by the researcher.

Immunogen

Amino acids H58-D156 from the human protein were used as the immunogen for the BMAL1 antibody.

Storage

After reconstitution, the BMAL1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.