Data Sheet (Cat.No.TMAC-03306)

Anti-PKA 2 beta Antibody (8T490)

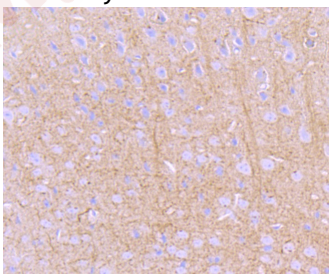
Product Details

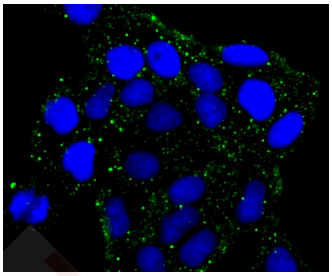
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 46 kDa.
Clone:	8T490
Purification:	ProA affinity purified

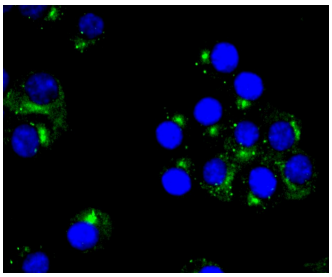
Applications

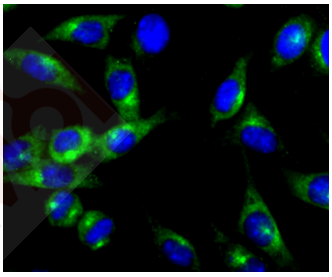
Verified Activity:

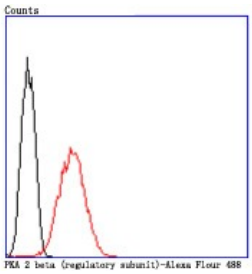
1. Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-PKA 2 beta (regulatory subunit) antibody. Counter stained with hematoxylin.
2. ICC staining PKA 2 beta (regulatory subunit) in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
3. ICC staining PKA 2 beta (regulatory subunit) in N2A cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
4. ICC staining PKA 2 beta (regulatory subunit) in SH-SY5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
5. Flow cytometric analysis of N2A cells with PKA 2 beta (regulatory subunit) antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.











Application: FCM,ICC/IF,IHC,IP,WB

Recommended: WB: 1:500-1000; IHC: 1:50-200; ICC/IF: 1:50-200; FCM: 1:50-100

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein

Uniprot ID: P31323

Synonyms: Pkarb2;PRKAR 2;PKA 2 b;cAMP dependent protein kinase type II beta regulatory chain; PKA2beta;cAMP dependent protein kinase type II beta regulatory subunit;WUGSC:H RG363E19.2;KAP3_HUMAN;PKA 2 β;Protein kinase cAMP dependent regulatory type II beta;RII beta;cAMP-dependent protein kinase type II-beta regulatory subunit;PKA2b;MGC116401;AI451071;RII (beta);PRKAR2B;H RG363E19.2;AW061005;RIIbeta;RATDNA;PKA2β;PRKAR2

Research Background

The second messenger cyclic AMP mediates diverse cellular responses to external signals such as proliferation, ion transport, regulation of metabolism and gene transcription by activation of the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of the tetrameric PKA holoenzyme resulting in release of active catalytic subunits. One of several regulatory subunits, p-PKA IIβ reg (cAMP-dependent protein kinase type II-beta regulatory subunit), also known as PRKAR2B, is a 418 amino acid protein that is phosphorylated by the activated catalytic chain. p-PKA IIβ reg knockout mice exhibit diminished white adipose tissue and were protected against diet-induced obesity and fatty livers,as well as markedly reduced leptin mRNA. Also playing a role in the immune response, p-PKA IIβ reg suppresses CREB transcriptional activity and down-regulates IL-2 production in T-lymphocytes.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481