For Research Use Only

Phospho-Beta Catenin (Ser552) Polyclonal antibody



Catalog Number: 28778-1-AP

Basic Information

Catalog Number: 28778-1-AP

Size: 150 µg/ml Source:

Rabbit Isotype: IgG GenBank Accession Number:

BC058926 GeneID (NCBI):

ENSEMBL Gene ID: ENSG00000168036 UNIPROT ID: P35222

Full Name: catenin (cadherin-associated protein),

beta 1, 88kDa Calculated MW: 781 aa, 86 kDa Observed MW: 86-100 kDa Purification Method:

IF/ICC 1:200-1:800

Antigen affinity purification
Recommended Dilutions:
WB 1:1000-1:4000

Applications

Tested Applications: IF/ICC, WB, ELISA Species Specificity: Human, Mouse, Rat Positive Controls:

WB: Forskolin treated A431 cells, HSC-T6 cells, Forskolin treated HSC-T6 cells, HT-29 cells, Forskolin treated HT-29 cells

IF/ICC : MCF-7 cells,

Background Information

 β -Catenin, also known as CTNNB1, is an evolutionarily conserved, multifunctional intracellular protein. β -Catenin is a 92-kDa protein, originally identified in cell adherens junctions (AJs) where it functions to bridge the cytoplasmic domain of cadherins to a-catenin and the actin cytoskeleton. Besides its essential role in the AJs, β -catenin is also a key downstream component of the canonical Wnt pathway that plays diverse and critical roles in embryonic development and adult tissue homeostasis. The Wnt/ β -catenin pathway is also involved in the activation of other intracellular messengers such as calcium fluxes, JNK, and SRC kinases. Deregulation of β -catenin activity is associated with multiple diseases including cancers(PMID: 22617422, PMID: 18334222). Both AMPK and AKT phosphorylates β -catenin at Ser 552. The phosphorylation of β -catenin at Ser552 can stabilize β -catenin, enhance its nuclear accumulation and increase its transcriptional activity(PMID: 2865606, PMID: 20361929).

Storage

Storage:

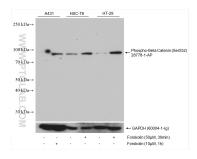
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

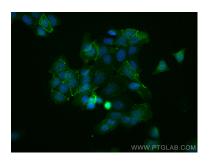
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Untreated and Forskolin treated cells were subjected to SDS PAGE followed by western blot with 28778-1-AP (Phospho-Beta Catenin (Ser552) antibody) at dlution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH (60004-1-Ig) antibody as loading control.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Phospho-Beta Catenin (Ser552) antibody (28778-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).