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Datasheet for ABIN7317597
CTNNB1 Protein (GST tag,His tag)

Overview

Quantity:	100 µg
Target:	CTNNB1
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CTNNB1 protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human Beta-Catenin/CTNNB1 Protein (His & GST Tag)
Sequence:	Met 1-Leu 781
Characteristics:	A DNA sequence encoding the human CTNNB1 (P35222-1) (Met 1-Leu 781) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	CTNNB1
Alternative Name:	Beta-Catenin/CTNNB1 (CTNNB1 Products)
Background:	Background: beta-Catenin, also known as CTNNB1, is a member of the armadillo family of proteins. These proteins have multiple copies of the so-called armadillo repeat domain, which is specialized for protein-protein binding. It is part of a complex of proteins that constitute

Target Details

adherens junctions (AJs). AJs are necessary for the creation and maintenance of epithelial cell layers by regulating cell growth and adhesion between cells. CTNNB1 also anchors the actin cytoskeleton and may be responsible for transmitting the contact inhibition signal that causes cells to stop dividing once the epithelial sheet is complete. Finally, beta-Catenin binds to the product of the APC gene, which is mutated in adenomatous polyposis of the colon. Defects in beta-Catenin can cause colorectal cancer, pilomatrixoma (PTR), medulloblastoma, and ovarian cancer. CTNNB1 is a key downstream component of the canonical Wnt signaling pathway. In the absence of Wnt, it forms a complex with AXIN1, AXIN2, APC, CSNK1A1 and GSK3B that promotes phosphorylation on N-terminal Ser and Thr residues and ubiquitination of CTNNB1 via BTRC and its subsequent degradation by the proteasome. In the presence of Wnt ligand, beta-Catenin is not ubiquitinated and accumulates in the nucleus, where it acts as a coactivator for transcription factors of the TCF/LEF family, leading to activate Wnt responsive genes. CTNNB1 is involved in the regulation of cell adhesion. The majority of beta-catenin is localized to the cell membrane and is part of E-cadherin/catenin adhesion complexes which are proposed to couple cadherins to the actin cytoskeleton.

Synonym: armadillo,CTNNB,MRD19

Molecular Weight: 113 kDa

Pathways: [WNT Signaling](#), [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Peptide Hormone Metabolism](#), [Regulation of Muscle Cell Differentiation](#), [Cell-Cell Junction Organization](#), [Tube Formation](#), [Maintenance of Protein Location](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 100 mM NaCl, 2 mM GSH, 10 % glycerol, pH 8.0

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.