# Recombinant Human CTNNB1 Protein (Ala2-Leu781), His tagged

**Cat. No.** CTNNB1-1875H **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Recombinant human CTNNB1 (Ala2-Leu781) fused with His tag was expressed in E. coli. |
| **Species** | Human |
| **Source** | E.coli |
| **ProteinLength** | Ala2-Leu781 |
| **Description** | 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 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 dowstream 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 |

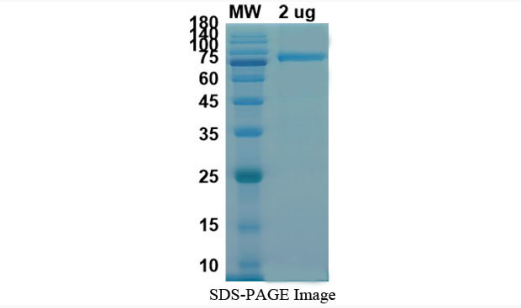
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| | by the proteasome. In the presence of Wnt ligand, beta-Catenin is not ubiquitinated and accumulates in the nucleus, where it acts as a coactivator for transcription factors of the TCF/LEF family, leading to activate Wnt responsive genes. CTNNB1 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. |
| **Form** | Lyophilized powder/frozen liquid |
| **Molecular Mass** | 87.54 kDa |
| **Purity** | >90% as determined by SDS-PAGE |
| **Notes** | For research use only. |
| **Storage** | Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt. |
| **Storage Buffer** | Supplied as solution form in PBS, pH 7.5 or lyophilized from PBS, pH 7.5. |
| **Reconstitution** | Reconstitute in sterile water for a stock solution. |
| **Shipping** | They are shipped out with dry ice/blue ice unless customers require otherwise. |

## GENE INFORMATION

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| **Gene Name** | CTNNB1 catenin (cadherin-associated protein), beta 1, 88kDa [ Homo sapiens (human) ] |
| **Official Symbol** | CTNNB1 |

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| **Synonyms** | CTNNB1; catenin (cadherin-associated protein), beta 1, 88kDa; catenin (cadherin associated protein), beta 1 (88kD), CTNNB; catenin beta-1; beta catenin; CTNNB; FLJ25606; FLJ37923; DKFZp686D02253; |
| **Gene ID** | 1499 |
| **mRNA Refseq** | NM_001098209 |
| **Protein Refseq** | NP_001091679 |
| **MIM** | 116806 |
| **UniProt ID** | P35222 |
| **SDS-PAGE** |  SDS-PAGE Image |

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