

## Product Information

### Catenin $\beta$ , GST-tagged, human recombinant, expressed in Sf9 insect cells

Catalog Number **SRP5172**  
Storage Temperature  $-70^{\circ}\text{C}$

Synonyms: CTNNB, FLJ25606

#### Product Description

$\beta$ -catenins are cytoplasmic proteins that are ubiquitously expressed. These proteins associate with E-cadherin at cellular junctions. <sup>1</sup>  $\beta$ -catenin interacts with TCF and LEF transcription factors, and is an essential member of the Wntless-Wnt signal transduction pathway. The adenomatous polyposis coli (APC) tumor-suppressor protein, together with Axin and GSK3b, form a Wnt-regulated signaling complex that mediates phosphorylation-dependent degradation of  $\beta$ -catenin by the proteasome. APC and Siah-1 mediate a novel  $\beta$ -catenin degradation pathway linking p53 activation to cell cycle control. Activating mutations in the human  $\beta$ -catenin gene have been found in human colon cancer and melanomas.<sup>2</sup>

Recombinant full-length human Catenin  $\beta$  was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is NM\_001904. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~115 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

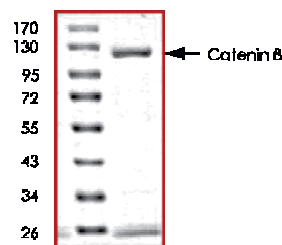
#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

The product ships on dry ice and storage at  $-70^{\circ}\text{C}$  is recommended. After opening, aliquot into smaller quantities and store at  $-70^{\circ}\text{C}$ . Avoid repeated handling and multiple freeze/thaw cycles.

**Figure 1.**  
SDS-PAGE Gel of Typical Lot  
70–95% (densitometry)



#### References

1. Morin, P.J. et al., Activation of beta-catenin-Tcf signaling in colon cancer by mutations in beta-catenin or APC. *Science*, **275(5307)**, 1787-1790 (1997).
2. Liu, J. et al., Siah-1 mediates a novel beta-catenin degradation pathway linking p53 to the adenomatous polyposis coli protein. *Mol. Cell*, **7(5)**, 927-36 (2001).

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