TECHNICAL DATA SHEET

CyFlow™ Beta-catenin Purified
Anti-Hu/Ms; Clone EM-22

REF **BP858553**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	β-catenin
Alternative Names	—
Clone	EM-22
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human | Mouse, Hamster
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Recombinant human β-catenin

Specificity

The mouse monoclonal antibody EM-22 recognizes C-terminal part of β-catenin, a 88 kDa multifunctional protein involved both in cell adhesion and in activation of transcription.

Contact Information:

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot
- Immunocytochemistry

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

β-catenin is a multifunctional protein involved both in cell adhesion and in activation of transcription. Calcium-dependent intercellular adhesion transmembrane glycoprotein E-cadherin interacts by its cytoplasmic domain with reciprocally bound α, β and γ catenin. β-catenin links this complex through α-actinin to the cytoskeleton. Functional cadherin-catenin system is important for invasiveness of tumor cells. β-catenin level in cytoplasm is controlled by glycogen synthase kinase-3 β. When activity of this kinase is blocked (e.g. by excessive stimulation of Wnt signaling pathway), hypophosphorylated stable form of β-catenin accumulates in the cytoplasm, translocates to the nucleus and activates transcription of genes including those that are involved in cell cycle control. As a result, cell division and neoplastic transformation are promoted.

References

- Valenta T, Lukas J, Korinek V: HMG box transcription factor TCF-4's interaction with CtBP1 controls the expression of the Wnt target Axin2/Conductin in human embryonic kidney cells. Nucleic Acids Res. 2003 May 1; 31(9):2369-80. < PMID: 12711682 >
- Nowak M, Madej JA, Dziegiel P: Expression of E-cadherin, beta-catenin and Ki-67 antigen and their reciprocal relationships in mammary adenocarcinomas in bitches. Folia Histochem Cytobiol. 2007; 45(3):233-8. < PMID: 17951173 >

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• Jung IM, Chung JK, Kim YA, Kim JE, Heo SC, Ahn YJ, Hwang KT, Kim BG, Lee KL, Kim CW, Kim WH, Chang MS: Epstein-Barr Virus, Beta-Catenin, and E-cadherin in Gastric Carcinomas. J Korean Med Sci. 2007 Oct; 22(5):855-61. < PMID: 17982235 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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