



Rabbit Anti-Human β -Cadherin monoclonal antibody, clone E21B9 (CABT-Z505R)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	This antibody recognizes endogenous levels of total β -catenin protein.
Immunogen	A synthetic peptide corresponding to residues surrounding Pro714 of human β -catenin protein.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat, Monkey
Clone	E21B9
Purification	Purified
Conjugate	Unconjugated
Applications	WB, IP, IHC-P, IF-IC, FC, ChIP, ChIPseq Recommended dilution: WB: 1:1000 IF-IC: 1:50-1:100 IHC: 1:25-1:100 IHC-P: 1:50-1:200 IP: 1:50 FC: 1:50-1:100 ChIP: 1:25 ChIPseq: 1:25
Molecular Weight	92 kDa
Format	Liquid

Concentration	Lot specific
Size	100 µl
Buffer	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide.
Preservative	<0.02% sodium azide
Storage	Store at -20°C long term. Avoid freeze / thaw cycle.
Ship	Wet ice

BACKGROUND

Introduction

Cadherins are a superfamily of transmembrane glycoproteins that contain cadherin repeats of approximately 100 residues in their extracellular domain. Cadherins mediate calcium-dependent cell-cell adhesion and play critical roles in normal tissue development. The classic cadherin subfamily includes N-, P-, R-, B-, and E-cadherins, as well as about ten other members that are found in adherens junctions, a cellular structure near the apical surface of polarized epithelial cells. The cytoplasmic domain of classical cadherins interacts with β -catenin, γ -catenin (also called plakoglobin), and p120 catenin. β -catenin and γ -catenin associate with α -catenin, which links the cadherin-catenin complex to the actin cytoskeleton. While β - and γ -catenin play structural roles in the junctional complex, p120 regulates cadherin adhesive activity and trafficking. Investigators consider E-cadherin an active suppressor of invasion and growth of many epithelial cancers. Research studies indicate that cancer cells have upregulated N-cadherin in addition to loss of E-cadherin. This change in cadherin expression is called the "cadherin switch." N-cadherin cooperates with the FGF receptor, leading to overexpression of MMP-9 and cellular invasion. Research studies have shown that in endothelial cells, VE-cadherin signaling, expression, and localization correlate with vascular permeability and tumor angiogenesis. Investigators have also demonstrated that expression of P-cadherin, which is normally present in epithelial cells, is also altered in ovarian and other human cancers.

Keywords CTNNB1;catenin (cadherin-associated protein), beta 1, 88kDa;CTNNB;MRD19;armadillo;catenin beta-1

GENE INFORMATION

Gene Name	CTNNB1
Entrez Gene ID	1499
UniProt ID	P35222