PRODUCT INFORMATION



p120-Catenin (C-Term) Rabbit Monoclonal Antibody (Clone RM353) Item No. 32283

Overview and Properties

Contents: Synonyms:	This vial contains 100 μl of protein A-affinity purified monoclonal antibody. Catenin (Cadrerin-associated Protein) $\delta 1$ δ -Catenin
Immunogen:	Peptide from the C-terminal region of human p120-catenin
Cross Reactivity:	(+) p120-Catenin
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM353
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:1,000-1:5,000 for IHC and 1:500-1:1,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



WB of A341 cell lysate using p120-Catenin (C-Term) Rabbit Monoclonal Antibody (Clone RM353) at a 1:500 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human kidney tissue using p120-Catenin (C-Term) Rabbit Monoclonal Antibody (Clone RM353) at a 1:5,000 dilution.

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/13/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

p120-Catenin is a member of the armadillo repeat domain protein family with roles in cell adhesion and junction maturation, as well as in the regulation of Rho family GTPase activity.¹ Alternative splicing of *CTNND1* pre-mRNA produces 64 isoforms with isoform 1 and 3 most commonly expressed.^{2,3} p120 isoform 1 is composed of an N-terminal coiled-coil domain, a regulatory domain, an armadillo repeat domain that facilitates cadherin interaction, and a C-terminal tail and is expressed in mesenchymal and non-epithelial cells. p120-Catenin isoform 3 lacks the N-terminal coiled-coil domain and is primarily expressed in epithelial cells.² p120-Catenin is localized in three subcellular pools, a membrane-associated cadherin-bound pool, a cytoplasmic pool that modulates Rho GTPases, and a nuclear pool that associates with the transcriptional repressor Kaiso.³ Isoform switching from p120 isoform 3 to isoform 1 is coordinated with the E-cadherin to N-cadherin switch that occurs during epithelial-to-mesenchymal transition (EMT). Loss of *CTNND1* expression is positively correlated with disease activity in patients with active Crohn's disease or ulcerative colitis.⁴ Increased levels of cytoplasmic p120-catenin are correlated with late-stage disease, lymph node metastasis, and reduced survival in patients with colorectal cancer, as well as poor prognosis in patients with lung squamous cell carcinoma and adenocarcinoma.¹ Cayman's p120-Catenin (C-Term) Rabbit Monoclonal Antibody (Clone RM353) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

- 1. Kourtidis, A., Ngok, S.P., and Anastasiadis, P.Z. p120 catenin: An essential regulator of cadherin stability, adhesion-induced signaling, and cancer progression. *Prog. Mol. Biol. Transl. Sci.* **116**, 409-432 (2013).
- 2. Carnahan, R.H., Rokas, A., Gaucher, E.A., *et al.* The molecular evolution of the p120-catenin subfamily and its functional associations. *PLoS One* **5(12)**, e15747 (2010).
- 3. Hu, G. p120-Catenin: A novel regulator of innate immunity and inflammation. *Crit. Rev. Immunol.* **32(2)**, 127-138 (2012).
- 4. Karayiannakis, A.J., Syrigos, K.N., Efstathiou, J., *et al.* Expression of catenins and E-cadherin during epithelial restitution in inflammatory bowel disease. *J. Pathol.* **185(4)**, 413-418 (1998).

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM