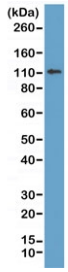
E-cadherin Antibody for WB / Epithelial Adhesion Protein Western Blot Antibody [clone RM244] (R20265)

Catalog No.	Formulation	Size
R20265-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

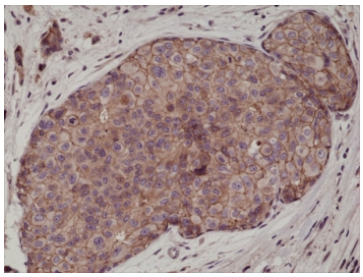
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM244
Purity	Protein A purified from animal origin-free supernatant
UniProt	P12830
Gene ID	999
Localization	Membrane, cytoplasmic
Applications	Immunohistochemistry : 1:500-1:1000 (1) Western Blot : 1:1000-1:2000
Limitations	This E-cadherin Antibody for WB / Epithelial Adhesion Protein Western Blot Antibody is available for research use only.



E-cadherin Antibody for WB. Western blot analysis of Cadherin 1 / CDH1 expression in human MCF7 cell lysate using clone RM244 antibody at 1:1000, showing a prominent band near the predicted molecular weight corresponding to mature E-cadherin. E-cadherin is synthesized as a precursor and undergoes glycosylation and processing, resulting in an apparent molecular weight typically observed between approximately 80-120 kDa, with the precursor form near 135 kDa. The detected band is consistent with glycosylated mature E-cadherin in epithelial cells.



IHC testing of FFPE human breast cancer tissue with recombinant E-Cadherin antibody at 1:1000.

Description

E-cadherin (CDH1) is a calcium-dependent transmembrane glycoprotein that functions as a central mediator of epithelial cell-cell adhesion and is a defining component of adherens junctions. E-cadherin Antibody for WB / Epithelial Adhesion Protein Western Blot Antibody (clone RM244) enables detection of this core adhesion molecule in lysate-based assays and is widely used to assess epithelial phenotype in human cell line models. E-cadherin is also referred to as Cadherin 1 antibody and is a well-established marker of epithelial integrity and junctional organization.

In western blot applications, E-cadherin antibody typically detects a full-length transmembrane protein that is abundantly expressed in epithelial-derived cell lines such as MCF7. These cells retain strong epithelial characteristics and serve as a standard model for studying cell-cell adhesion, making them highly suitable for E-cadherin western blot analysis. Detection of E-cadherin in this context provides a direct readout of epithelial adhesion status and supports comparison across experimental conditions that influence cellular phenotype.

Loss or reduction of E-cadherin expression is a hallmark of epithelial-to-mesenchymal transition and is frequently associated with increased cellular motility and tumor progression. Conversely, strong expression supports maintenance of epithelial architecture and cohesive cell-cell interactions. E-cadherin Antibody for WB is therefore widely used to monitor changes in adhesion state and to validate epithelial versus mesenchymal characteristics in cultured cell systems.

At the molecular level, E-cadherin forms complexes with intracellular binding partners including beta-catenin and alpha-catenin, linking extracellular adhesion to cytoskeletal organization and signaling pathways that regulate proliferation, polarity, and differentiation. Western blot detection of E-cadherin complements studies of these associated pathways and provides a reliable method for evaluating expression of a central epithelial adhesion protein.

The recombinant rabbit monoclonal clone RM244 antibody supports consistent detection of E-cadherin in western blot workflows and is well suited for experiments requiring clear identification of epithelial adhesion-associated protein signal in human cell line lysates. This E-cadherin antibody is particularly effective for studies focused on epithelial biology, adhesion regulation, and phenotypic characterization in cultured cells.

This antibody is part of the CDH1 antibody collection, where multiple E-cadherin antibody formats and applications are available for studying epithelial adhesion and cancer progression.

Application Notes

The stated application concentrations are suggested starting points. Titration of the E-cadherin Antibody for WB / Epithelial Adhesion Protein Western Blot Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

1. A pH6 Citrate buffer or pH9 Tris/EDTA buffer HIER step is recommended for testing of FFPE tissue sections.

Immunogen

A peptide corresponding to E-Cadherin/CDH1 was used as the immunogen for this recombinant E-Cadherin antibody.

Storage

Store the E-Cadherin antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

Alternate Names

CDH1 antibody, E-cadherin western blot antibody, epithelial adhesion protein antibody, Cadherin 1 WB antibody, adherens junction protein antibody