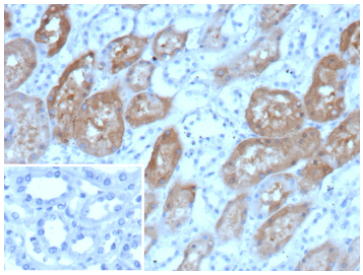
CDH6 Antibody / Cadherin 6 / K-Cadherin [clone CDH6/9347] (V5846)

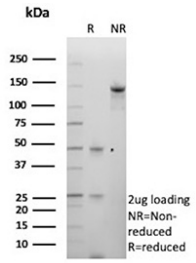
Catalog No.	Formulation	Size
V5846-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5846-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5846SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CDH6/9347
UniProt	P55285
Localization	Cell membrane, cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This CDH6/Cadherin 6 antibody is available for research use only.



Immunohistochemistry analysis of Cadherin 6 (CDH6) expression. CDH6/Cadherin 6 antibody (clone CDH6/9347) staining was performed on formalin-fixed, paraffin-embedded human renal cell carcinoma tissue, showing DAB-positive membranous and cytoplasmic staining in tumor cells, with hematoxylin counterstaining. The inset shows a negative control processed in parallel using PBS in place of the primary antibody, demonstrating minimal background signal with secondary antibody only.



SDS-PAGE Analysis of CDH6/Cadherin 6 Antibody (clone CDH6/9347). Confirmation of Purity and Integrity of Antibody.

Description

CDH6 antibody targets Cadherin 6, also known as K-Cadherin, a calcium-dependent cell-cell adhesion molecule encoded by the CDH6 gene and a member of the classical cadherin family. Cadherin 6 is a single-pass transmembrane glycoprotein predominantly localized to the plasma membrane at adherens junctions, where it mediates homophilic adhesion between neighboring cells. CDH6 expression is most prominent in renal epithelium, nervous system tissues, and select epithelial compartments, reflecting its role in tissue organization and morphogenesis.

Functionally, Cadherin 6 contributes to epithelial cohesion and structural integrity by linking adjacent cells through calcium-dependent interactions and coupling to the actin cytoskeleton via catenin complexes. A short functional summary is that CDH6 supports stable cell-cell adhesion required for proper epithelial architecture and differentiation. Through these adhesive functions, K-Cadherin influences cell polarity, migration, and tissue patterning during development.

At the molecular level, Cadherin 6 contains multiple extracellular cadherin repeat domains responsible for calcium binding and adhesive specificity, a transmembrane region, and a conserved cytoplasmic tail that interacts with beta-catenin and related adaptor proteins. These structural features integrate extracellular adhesion with intracellular signaling pathways. CDH6 antibody reagents are therefore valuable for studying adherens junction biology, epithelial development, and regulation of cell-cell contacts. Clone CDH6/9347 is designed to recognize Cadherin 6 and supports consistent detection of CDH6 expression in research applications.

From a biological and disease relevance perspective, altered Cadherin 6 expression has been reported in several cancers, including renal, ovarian, and thyroid carcinomas, where changes in CDH6 levels may be associated with tumor progression and invasive behavior. Cadherin 6 is also investigated in developmental biology due to its regulated expression during organogenesis. Clone CDH6/9347 provides a reliable reagent for examining Cadherin 6 expression in studies of epithelial differentiation, cancer biology, and cell adhesion dynamics.

Developmentally, CDH6 expression is tightly regulated and contributes to tissue-specific patterning and morphogenetic processes. CDH6 antibodies from NSJ Bioreagents are supplied for research use to support investigations in epithelial biology, development, and translational research.

Application Notes

Optimal dilution of the CDH6/Cadherin 6 antibody should be determined by the researcher.

Immunogen

A recombinant fragment (around amino acids 250-450) of human Cadherin 6 protein (CDH6) (exact sequence is proprietary) was used as the immunogen for the CDH6/Cadherin 6 antibody.

Storage

CDH6/Cadherin 6 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.