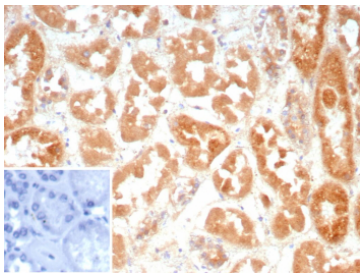
K-Cadherin Antibody / Cadherin 6 / CDH6 [clone CDH6/9300R] (V5566)

Catalog No.	Formulation	Size
V5566-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5566-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5566SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

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, kappa
Clone Name	CDH6/9300R
Purity	Protein A/G affinity
UniProt	P55285
Localization	Cytoplasm, Cell membrane
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant K-Cadherin antibody is available for research use only.



Immunohistochemistry analysis of Cadherin 6 (CDH6) expression. K-Cadherin antibody (clone CDH6/9300R) staining was performed on formalin-fixed, paraffin-embedded human kidney tissue, showing DAB-positive membranous and cytoplasmic staining in renal tubular epithelial 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.

Description

K-Cadherin antibody targets Cadherin 6, a calcium-dependent cell-cell adhesion molecule encoded by the CDH6 gene and a member of the classical cadherin family. Cadherin 6, also commonly referred to as K-Cadherin, is a single-pass

transmembrane glycoprotein predominantly localized to the plasma membrane at adherens junctions, where it mediates homophilic interactions between neighboring cells. CDH6 expression is especially prominent in renal tubular epithelium, select epithelial tissues, and the nervous system, consistent with its role in epithelial organization and tissue morphogenesis.

Functionally, Cadherin 6 contributes to stable epithelial cohesion by linking adjacent cells through calcium-dependent adhesion and coupling to the actin cytoskeleton via catenin complexes. A short functional summary is that CDH6 maintains tissue architecture and epithelial integrity by regulating cell-cell adhesion and polarity. Through these adhesive interactions, K-Cadherin influences epithelial differentiation, cellular migration, and spatial organization during development and tissue maintenance.

At the molecular level, Cadherin 6 contains multiple extracellular cadherin repeat domains responsible for calcium binding and adhesive specificity, a single transmembrane region, and a conserved cytoplasmic tail that interacts with beta-catenin and associated adaptor proteins. These structural features integrate extracellular adhesion with intracellular signaling pathways. K-Cadherin antibody reagents are therefore valuable tools for studying adherens junction biology, epithelial cell behavior, and changes in adhesion dynamics under physiological and pathological conditions. Clone CDH6/9300R is designed to recognize Cadherin 6 and supports consistent detection of CDH6 expression in research applications.

From a biological and disease relevance perspective, altered CDH6 expression has been reported in several cancers, including renal cell carcinoma, ovarian cancer, and thyroid carcinoma, where changes in Cadherin 6 levels may correlate with tumor progression and invasive potential. K-Cadherin is also of interest in developmental biology due to its regulated expression during organogenesis. Clone CDH6/9300R provides a reliable reagent for examining Cadherin 6 expression in studies of epithelial differentiation, cancer biology, and cell adhesion mechanisms.

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

Application Notes

Optimal dilution of the recombinant K-Cadherin antibody should be determined by the researcher.

Immunogen

Recombinant human Cadherin 6 protein (CDH6) was used as the immunogen for the recombinant K-Cadherin antibody.

Storage

Aliquot the recombinant K-Cadherin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.