

Store at  
-20C  
#47061**CELSR2 (D2M9H) XP<sup>®</sup> Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IHC-P	H	Endogenous	320	Rabbit IgG	#Q9HCU4	1952

**Product Usage Information****Application**

Western Blotting  
Immunohistochemistry (Paraffin)

**Dilution**

1:1000  
1:200

**Storage**

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. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #19983.

**Specificity/Sensitivity**

CELSR2 (D2M9H) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total CELSR2 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding His1781 of human CELSR2 protein.

**Background**

CELSR2 (cadherin EGF LAG seven-pass G-type receptor, also known as flamingo homolog 3 or epidermal growth factor-like protein 2) is a member of the flamingo subfamily of non-classical cadherins, part of the cadherin superfamily. CELSR2 is a 7-transmembrane helix receptor that contains nine cadherin-like domains, seven EGF-like repeats, and 2 laminin A G-type repeats (1). It shares structural characteristics of both an adhesion molecule and a G protein-coupled receptor, suggesting putative roles in both cell-cell adhesion and juxtacrine signaling. Its function has been associated with dendrite morphogenesis (2), neural plate anterior-posterior pattern formation (3), and regulation of transcription via the Wnt signaling pathway (4). In a loss-of-function mouse model, *Celsr2* deletion resulted in defects in the planar organization of ependymal cilia, leading to defective cerebrospinal fluid dynamics and hydrocephalus (5). In humans, SNPs in the CELSR2 gene cluster on chromosome 1 have been associated with enhanced risk of coronary artery disease (6).

**Background References**

1. Vincent, J.B. et al. (2000) *DNA Res* 7, 233-5.
2. Shima, Y. et al. (2004) *Dev Cell* 7, 205-16.
3. Devenport, D. and Fuchs, E. (2008) *Nat Cell Biol* 10, 1257-68.
4. Qu, Y. et al. (2014) *Proc Natl Acad Sci U S A* 111, E2996-3004.
5. Tissir, F. et al. (2010) *Nat Neurosci* 13, 700-7.
6. Zhou, Y.J. et al. (2015) *Int J Clin Exp Pathol* 8, 9543-51.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

**Cross-Reactivity Key**

**H:** Human

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