

**MESDC2 (C22F5) Rabbit mAb**

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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 25, 26	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q14696	<b>Entrez-Gene Id:</b> 23184
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:50

**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.

**Specificity/Sensitivity**

MESDC2 (C22F5) Rabbit mAb detects endogenous levels of total MESDC2 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a recombinant human MESDC2 protein.

**Background**

Mesoderm development candidate genes 1 (MESDC1) and 2 (MESDC2) were identified from the mesoderm development (MESD) deletion interval located on mouse chromosome 7 (1). MESD acts as a chaperone for low-density lipoprotein receptor (LDLR) proteins in the ER, and particularly associates with Wnt signaling pathway coreceptors LRP5 and LRP6 (2). MESD is required for proper LRP5/6 folding and maturation to the cell surface, which plays a major role in Wnt signaling (3-5). The interaction between MESD and LRP5 is disrupted by a G171V mutation in LRP5 that is found in individuals with a familial phenotype characterized by high bone mass (6).

**Background References**

1. Wines, M.E. et al. (2001) *Genomics* 72, 88-98.
2. Hsieh, J.C. et al. (2003) *Cell* 112, 355-67.
3. Herz, J. and Marschang, P. (2003) *Cell* 112, 289-92.
4. Li, Y. et al. (2006) *FEBS Lett* 580, 5423-8.
5. Li, Y. et al. (2005) *J Cell Sci* 118, 5305-14.
6. Zhang, Y. et al. (2004) *Mol Cell Biol* 24, 4677-84.

**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 **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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