

**CXXC5 (D1O4P) 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, IP, IF-IC	H M R Mk	Endogenous	33	Rabbit IgG	#Q7LFL8	51523

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

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:100  
1:1000

**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**

CXXC5 (D1O4P) Rabbit mAb recognizes endogenous levels of total CXXC5 protein.

**Species predicted to react based on 100% sequence homology**

Bovine, Pig

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu172 of human CXXC5 protein.

**Background**

The CXXC-type zinc finger protein 5 (CXXC5) is a nuclear protein that regulates gene expression and is involved in the regulation of cell growth and differentiation, apoptosis, cell adhesion, and cytoskeletal organization. The CXXC5 protein is also known as retinoid-inducible nuclear factor (RINF) as it was originally identified from a set of genes upregulated by retinoic acid stimulation (1). CXXC5 is a transcriptional activator of the vascular endothelial growth factor receptor VEGFR2. The CXXC5 protein regulates differentiation and migration of endothelial cells and subsequent blood vessel formation downstream of bone morphogenic protein (BMP) signaling (2). CXXC5 also regulates TNFα-induced apoptosis by facilitating phosphorylation of Smad3 and the nuclear translocation of Smad4 (3). Expression of CXXC5 in skeletal muscle regulates expression of genes involved in skeletal myogenesis (4). This nuclear factor also plays an important role in the regulation of normal myelopoiesis. The CXXC5 gene is localized to the 5q31.2 chromosomal region that is often involved in abnormalities associated with various myeloid malignancies, and CXXC5 over-expression is associated with decreased overall survival in human AML (5). Interestingly, CXXC5 is also over-expressed in many solid tumors, and high expression is also correlated with poor prognosis in breast cancer (6).

**Background References**

1. Pendino, F. et al. (2009) *Blood* 113, 3172-81.
2. Kim, H.Y. et al. (2014) *FASEB J* 28, 615-26.
3. Wang, X. et al. (2013) *Curr Mol Med* 13, 1385-96.
4. Li, G. et al. (2014) *J Muscle Res Cell Motil* 35, 259-65.
5. Astori, A. et al. (2013) *Oncotarget* 4, 1438-48.
6. Knappskog, S. et al. (2011) *Ann Oncol* 22, 2208-15.

**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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

**Cross-Reactivity Key**

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

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