

**ZIP7/SLC39A7 (D1O3A) 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	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 50	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q92504	<b>Entrez-Gene Id:</b> 7922
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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**

ZIP7/SLC39A7 (D1O3A) Rabbit mAb recognizes endogenous levels of total ZIP7 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu201 of human ZIP7 protein.

**Background**

The solute carrier family 39 (zinc transporter) member 7 (SLC39A7, ZIP7) is an ER and Golgi membrane protein that regulates cellular zinc homeostasis by controlling release of zinc from these organelles to the cytoplasm (1,2). Zinc release mediated by ZIP7 results in activation of protein kinases that are involved in cell proliferation and migration (3,4). The protein kinase CK2 phosphorylates and activates ZIP7 in response to extracellular signals, such as growth factor stimulation (4,5). Increased expression of ZIP7 is observed in breast cancer tissues (6). Research studies indicate that ZIP7 is responsible for activation of multiple tyrosine kinases in aggressive, tamoxifen-resistant breast cancer (7,8).

**Background References**

1. Taylor, K.M. et al. (2004) *Biochem J* 377, 131-9.
2. Huang, L. et al. (2005) *J Biol Chem* 280, 15456-63.
3. Hogstrand, C. et al. (2009) *Trends Mol Med* 15, 101-11.
4. Taylor, K.M. et al. (2012) *Cell Cycle* 11, 1863-4.
5. Taylor, K.M. et al. (2012) *Sci Signal* 5, ra11.
6. Taylor, K.M. (2008) *Biochem Soc Trans* 36, 1247-51.
7. Taylor, K.M. et al. (2007) *Mol Med* 13, 396-406.
8. Taylor, K.M. et al. (2008) *Endocrinology* 149, 4912-20.

**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

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