

#55935 Store at -20C

**SH3BP4 (D3D9I) Rabbit mAb****Cell Signaling**  
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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:
WB, IP	H Mk	Endogenous	110	Rabbit IgG	#Q9P0V3	23677

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

Western Blotting

**Dilution**

1:1000

Immunoprecipitation

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**

SH3BP4 (D3D9I) Rabbit mAb recognizes endogenous levels of total SH3BP4 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val222 of human SH3BP4 protein.

**Background**

The mTORC1 kinase complex is a critical regulator of cell growth (1,2). Its activity is modulated by environmental factors such as energy levels, growth factors, and amino acids (3, 4). The GTPases RagA, RagB, RagC, and RagD mediate amino acid signaling to activate mTORC1 (1, 2). SH3BP4 (SH3 domain-binding protein 4) binds to the inactive Rag GTPase complex during amino acid starvation and prevents the association of Rag GTPase complex with mTORC1 resulting in the suppression of mTORC1 activation and cell growth (5).

**Background References**

1. Sancak, Y. et al. (2008) *Science* 320, 1496-501.
2. Kim, E. et al. (2008) *Nat Cell Biol* 10, 935-45.
3. Hay, N. and Sonenberg, N. (2004) *Genes Dev* 18, 1926-45.
4. Wullschleger, S. et al. (2006) *Cell* 124, 471-84.
5. Kim, Y.M. et al. (2012) *Mol Cell* 46, 833-46.

**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****WB:** Western Blotting **IP:** Immunoprecipitation**Cross-Reactivity Key**

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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