

Phospho-GRB10 (Ser476) (D4E6) Rabbit mAb

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Applications: W, IP	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 80	Source/Isotype: Rabbit IgG	UniProt ID: #Q13322	Entrez-Gene Id: 2887
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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

Phospho-GRB10 (Ser476) (D4E6) Rabbit mAb recognizes endogenous levels of GRB10 protein only when phosphorylated at Ser476.

Species predicted to react based on 100% sequence homology

Rat

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser476 of human GRB10 protein.

Background

The GRB7 family of adaptor proteins consist of GRB7, GRB10 and GRB14, which all contain an amino-terminal proline-rich SH3 binding domain, followed by PH, PBS, and SH2 domains. Each member of the family has several splice variants (1). It has been reported that GRB10 interacts with many receptor tyrosine kinases (RTKs) as well as downstream signal molecules including Raf, Akt, and Nedd4 (1,2). Although it was originally thought that GRB10 is exclusively phosphorylated at serine residues (3), Src kinase family members have been shown to phosphorylate GRB10 at Tyr67 (4). Recently GRB10 was shown to be a direct substrate of mTORC1 (5). It is phosphorylated by mTORC1 at Ser150, Ser428, and Ser476 upon insulin stimulation (5).

Background References

1. Han, D. C. et al. (2001) *Oncogene* 20, 6315-6321.
2. Jahn, T. et al. (2002) *Mol. Cell. Biol.* 22, 979-991.
3. Ooi, J. et al. (1995) *Oncogene* 10, 1621-1630.
4. Langlais, P. et al. (2000) *Oncogene* 19, 2895-2903.
5. Hsu, P.P. et al. (2011) *Science* 332, 1317-22.

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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