Revision 1

#5699 Store at -20C

IGBP1 (5F6) Mouse mAb

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	42	Mouse IgG1	#P78318	3476

Product Usage Information

Application	Dilution
Western Blotting	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

IGBP1 (5F6) Mouse mAb recognizes endogenous levels of total IGBP1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a recombinant protein specific to human IGBP1.

Background

Immunoglobulin binding protein 1 (IGBP1) interacts with the regulatory subunit C of serine/threonine phosphatase PP2A, and other protein phosphotases, PP4 and PP6 (1-3). Binding of IGBP1 to PP2A has been shown to regulate PP2A catalytic activity and its substrate specificity (1-4). Recent evidence suggests that IGBP1 may play a role in PP2Ac ubiquitination via its association with E3 ubiquitin ligase MID1 (5,6). IGBP1 negatively regulates apoptosis by targeting PP2A activity to suppress p38 mitogen-activated protein kinase activation by cytokines (7). Upon BCR cross-linking, IGBP1 transiently associates with tyrosine phosphorylated molecules, which in turn induce downstream signal transduction (7). Evidence suggests that IGBP1 association with PP2A may be involved in the rapamycin sensitive mTOR pathway (8,9). Formation of the IGBP1 and Midline ring finger protein (MID) complex has been identified as a prerequisite to pathogenesis of X-linked Optiz GBBB syndrome (10).

Background References

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3. Chen, J. et al. (1998) *Biochem Biophys Res Commun* 247, 827-32.
4. Sakashita, S. et al. (2011) *Pathol Int* 61, 130-7.
5. McConnell, J.L. et al. (2010) *Biochemistry* 49, 1713-8.
6. McDonald, W.J. et al. (2010) *J Cell Biochem* 110, 1123-9.
7. Murata, K. et al. (1997) *Proc Natl Acad Sci U S A* 94, 10624-9.
8. Prickett, T.D. and Brautigan, D.L. (2007) *Mol Cell Biol* 27, 4217-27.
9. Inui, S. et al. (1998) *Blood* 92, 539-46.
10. Short, K.M. et al. (2002) *BMC Cell Biol* 3, 1.

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

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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