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Store at -20C
#8226

HIP2 (D27C4) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 25	Source/Isotype: Rabbit IgG	UniProt ID: #P61086	Entrez-Gene Id: 3093
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Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:100

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

HIP2 (D27C4) Rabbit mAb recognizes endogenous levels of total HIP2 protein.

Species predicted to react based on 100% sequence homology

Bovine

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu161 of human HIP2 protein.

Background

Protein ubiquitination requires the concerted action of the E1, E2, and E3 ubiquitin-conjugating enzymes. Ubiquitin is first activated through ATP-dependent formation of a thiol ester with ubiquitin-activating enzyme E1. The activated ubiquitin is then transferred to a thiol group of ubiquitin-carrier enzyme E2. The final step is the transfer of ubiquitin from E2 to an ε-amino group of the target protein lysine residue, which is mediated by ubiquitin-ligase enzyme E3 (1).
Huntingtin-interacting protein-2 (HIP2), also known as E2-25K, is a member of the E2 protein family that is highly expressed in the brain and catalyzes multiubiquitin chain synthesis via Lys48 of ubiquitin (2). E2-25K is reportedly involved in Alzheimer's disease, Huntington's disease and antigen processing through its interaction with amyloid-β, huntingtin, and MHC-heavy chain proteins (3-6). Recent studies have also implicated HIP2 in the control of apoptosis and cell-cycle progression through its ability to regulate the stability of Smac/Diablo and cyclin B1 (7,8).

Background References

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- Chen, Z. and Pickart, C.M. (1990) *J Biol Chem* 265, 21835-42.
- Song, S. et al. (2003) *Mol Cell* 12, 553-63.
- de Pril, R. et al. (2007) *Mol Cell Neurosci* 34, 10-9.
- Flierman, D. et al. (2006) *Proc Natl Acad Sci USA* 103, 11589-94.
- Kalchman, M.A. et al. (1996) *J Biol Chem* 271, 19385-94.
- Bae, Y. et al. (2010) *Biochem Biophys Res Commun* 397, 718-23.
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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 **R:** Rat **Mk:** Monkey

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