

#3847 Store at -20C

E2-25K/Hip2 Antibody

**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R Mk	Endogenous	25	Rabbit	#P61086	3093

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	E2-25K/Hip2 Antibody detects endogenous levels of total E2-25K/Hip2 protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg11 of human E2-25K/Hip2 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	<p>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).</p> <p>E2-25K (Hip2) is a member of the E2 protein family that 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 (3-5). Lys14 of E2-25K can be modified by SUMOylation, with this modification resulting in inhibited E2 activity (6).</p>	
Background References	<ol style="list-style-type: none"> 1. Herskho, A. (1988) <i>J Biol Chem</i> 263, 15237-40. 2. Chen, Z. and Pickart, C.M. (1990) <i>J. Biol. Chem.</i> 265, 21835-21842. 3. Song, S. et al. (2003) <i>Mol. Cell</i> 12, 553-563. 4. de Pril, R. et al. (2007) <i>Mol. Cell. Neurosci.</i> 34, 10-19. 5. Flierman, D. et al. (2006) <i>Proc. Natl. Acad. Sci. USA</i> 103, 11589-11594. 6. Pichler, A. et al. (2005) <i>Nat. Struct. Mol. Biol.</i> 12, 264-269. 	

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
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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