

# HIP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54600

## Product Information

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<b>Application</b>	WB, IHC-P, IHC-F, IF, ICC, E
<b>Primary Accession</b>	<a href="#">O00291</a>
<b>Reactivity</b>	Rat, Dog
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	116221
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human HIP1
<b>Epitope Specificity</b>	401-500/1037
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Cytoplasm. Nucleus. Endomembrane system. Cytoplasmic vesicle > clathrin-coated vesicle membrane. Shuttles between cytoplasm and nucleus. Nuclear translocation can be induced by AR.
<b>SIMILARITY</b>	Belongs to the SLA2 family. Contains 1 ENTH (epsin N-terminal homology) domain. Contains 1 I/LWEQ domain.
<b>SUBUNIT</b>	Homodimer. Binds actin. Binds HTT (via N-terminus). This interaction is restricted to the brain. Binds to IFT57. In normal conditions, it poorly interacts with IFT57, HIP1 being strongly associated with HTT. However, in mutant HTT proteins with a long poly-Gln region, interaction between HTT and HIP1 is inhibited, promoting the interaction between HIP1 and IFT57. Interacts with CLTB (via N-terminus). Interacts (via coiled coil domain) with AR. Interacts with AP2A1, AP2A2, CLTC and HIP1R. Interacts with GRIA1, GRIN2A AND GRIN2B.
<b>DISEASE</b>	Note=A chromosomal aberration involving HIP1 is found in a form of chronic myelomonocytic leukemia (CMML). Translocation t(5;7)(q33;q11.2) with PDGFRB. The chimeric HIP1-PDGFRB transcript results from an in-frame fusion of the two genes. The reciprocal PDGFRB-HIP1 transcript is not expressed.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	Huntington disease is associated with the expansion of a polyglutamine tract, greater than 35 repeats, in the HD gene product huntingtin. HIP1 (huntingtin-interacting protein 1), a membrane-associated protein, binds specifically to the N-terminus of human huntingtin. HIP1 is ubiquitously expressed in different brain regions at low levels, and exhibits nearly identical subcellular fractionation as huntingtin. The huntingtin-HIP1 interaction is restricted to the brain and is inversely correlated to the polyglutamine length in the huntingtin, suggesting that loss of normal huntingtin-HIP1 interaction may compromise the membrane-cytoskeletal integrity in the brain. HIP1 contains an endocytic multidomain protein with a C-terminal Actin-binding domain, a central coiled-coil forming region and an N-terminal ENTH domain.

HIP1 may be involved in vesicle trafficking; the structural integrity of HIP1 is crucial for maintenance of normal vesicle size in vivo. HIP12 is a non-proapoptotic member of the HIP gene family that is expressed in the brain and shares a similar subcellular distribution pattern with HIP1. However, HIP12 differs from HIP1 in its pattern of expression at both the mRNA and protein level. HIP12 does not directly interact with huntingtin but can interact with HIP1.

## Additional Information

<b>Gene ID</b>	3092
<b>Other Names</b>	Huntingtin-interacting protein 1, HIP-1, Huntingtin-interacting protein I, HIP-I, HIP1
<b>Target/Specificity</b>	Ubiquitously expressed with the highest level in brain. Expression is up-regulated in prostate and colon cancer.
<b>Dilution</b>	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glycerol
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## Protein Information

<b>Name</b>	HIP1
<b>Function</b>	Plays a role in clathrin-mediated endocytosis and trafficking (PubMed: <a href="#">11532990</a> , PubMed: <a href="#">11577110</a> , PubMed: <a href="#">11889126</a> ). Involved in regulating AMPA receptor trafficking in the central nervous system in an NMDA-dependent manner (By similarity). Regulates presynaptic nerve terminal activity (By similarity). Enhances androgen receptor (AR)- mediated transcription (PubMed: <a href="#">16027218</a> ). May act as a proapoptotic protein that induces cell death by acting through the intrinsic apoptosis pathway (PubMed: <a href="#">11007801</a> ). Binds 3-phosphoinositides (via ENTH domain) (PubMed: <a href="#">14732715</a> ). May act through the ENTH domain to promote cell survival by stabilizing receptor tyrosine kinases following ligand-induced endocytosis (PubMed: <a href="#">14732715</a> ). May play a functional role in the cell filament networks (PubMed: <a href="#">18790740</a> ). May be required for differentiation, proliferation, and/or survival of somatic and germline progenitors (PubMed: <a href="#">11007801</a> , PubMed: <a href="#">12163454</a> ).
<b>Cellular Location</b>	Cytoplasm. Nucleus. Endomembrane system. Cytoplasmic vesicle, clathrin-coated vesicle membrane. Note=Shuttles between cytoplasm and nucleus. Nuclear translocation can be induced by AR
<b>Tissue Location</b>	Ubiquitously expressed with the highest level in brain. Expression is up-regulated in prostate and colon cancer

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