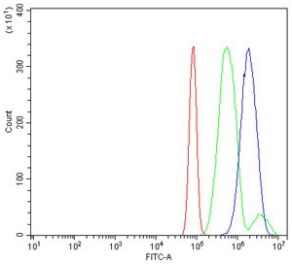
Huntingtin interacting protein 2 Antibody / HIP2 / UBE2K (RQ6693)

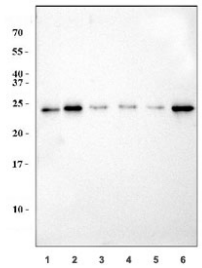
Catalog No.	Formulation	Size
RQ6693	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

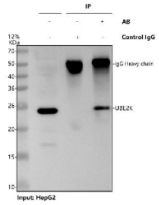
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Monkey
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P61086
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml Immunoprecipitation : 2ug per 500ug of lysate
Limitations	This Huntingtin interacting protein 2 antibody is available for research use only.



Flow cytometry testing of rat RH35 cells with Huntingtin interacting protein 2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Huntingtin interacting protein 2 antibody.



Western blot testing of 1) monkey COS-7, 2) human HEK293, 3) rat brain, 4) rat testis, 5) mouse brain and 6) mouse testis tissue lysate with Huntingtin interacting protein 2 antibody. Predicted molecular weight ~22 kDa.



Immunoprecipitation of Huntingtin interacting protein 2 protein from 500ug of human HepG2 whole cell lysate with 2ug of Huntingtin interacting protein 2 antibody.

Description

Huntingtin interacting protein 2 antibody targets Huntingtin interacting protein 2 (HIP2), also known as UBE2K, a ubiquitin conjugating enzyme that functions in ubiquitin-dependent protein degradation. HIP2 is an E2 enzyme that catalyzes the transfer of ubiquitin from E1 activating enzymes to substrate proteins in cooperation with E3 ubiquitin ligases. The protein localizes predominantly to the cytoplasm, where it supports proteasomal targeting of specific substrates involved in protein quality control and cellular homeostasis. As a member of the ubiquitin conjugating enzyme family, HIP2 plays an important role in maintaining regulated protein turnover.

Functionally, HIP2 has been shown to preferentially assemble K48-linked polyubiquitin chains, a modification that targets proteins for degradation by the 26S proteasome. Through this activity, HIP2 contributes to removal of misfolded, damaged, or regulatory proteins that must be tightly controlled for normal cell function. HIP2 expression is broadly detected across tissues, reflecting the universal requirement for ubiquitin-proteasome system activity in eukaryotic cells. A Huntingtin interacting protein 2 antibody supports studies examining ubiquitin-mediated protein degradation and proteostasis mechanisms.

HIP2 was originally identified through its interaction with huntingtin, linking it to pathways involved in neuronal protein regulation. Although HIP2 is not restricted to the nervous system, its association with huntingtin has made it a protein of interest in studies of neuronal stress and protein aggregation. Proper HIP2 function supports balanced ubiquitin signaling and prevents accumulation of ubiquitinated substrates that can disrupt cellular homeostasis. A Huntingtin interacting protein 2 antibody enables investigation of HIP2 expression and regulation in both neural and non-neural contexts.

From a biological and disease-relevance perspective, dysregulation of ubiquitin conjugating enzymes such as HIP2 can impact pathways related to neurodegeneration, cell cycle control, and stress responses. Altered ubiquitin chain formation affects protein stability and signaling fidelity, contributing to cellular dysfunction. HIP2-dependent ubiquitination therefore represents an important control point within the broader ubiquitin-proteasome system that governs protein lifespan and quality control.

At the molecular level, HIP2 is encoded by the UBE2K gene and produces a protein of approximately 200 amino acids. The protein contains a conserved active site cysteine required for ubiquitin thioester bond formation and chain elongation. Regulation of HIP2 activity is influenced by interacting E3 ligases, substrate availability, and cellular stress conditions. A Huntingtin interacting protein 2 antibody supports research applications focused on ubiquitination, proteasome-dependent degradation, and protein homeostasis, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the Huntingtin interacting protein 2 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids D33-E195) was used as the immunogen for the Huntingtin interacting protein 2 antibody.

Storage

After reconstitution, the Huntingtin interacting protein 2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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