

Dsk2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2175a

Specification

Dsk2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>O9UHD9</u> <u>O9OZM0, O9JJP9, O8R317, O9UMX0</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 65696 20-50

Dsk2 Antibody (N-term) - Additional Information

Gene ID 29978

Other Names Ubiquilin-2, Chap1, DSK2 homolog, Protein linking IAP with cytoskeleton 2, PLIC-2, hPLIC-2, Ubiquitin-like product Chap1/Dsk2, UBQLN2, N4BP4, PLIC2

Target/Specificity

This Dsk2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 20-50 amino acids from the N-terminal region of human Dsk2.

Dilution IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Dsk2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Dsk2 Antibody (N-term) - Protein Information



Name UBQLN2

Synonyms N4BP4, PLIC2

Function Plays an important role in the regulation of different protein degradation mechanisms and pathways including ubiquitin- proteasome system (UPS), autophagy and the endoplasmic reticulum- associated protein degradation (ERAD) pathway. Mediates the proteasomal targeting of misfolded or accumulated proteins for degradation by binding (via UBA domain) to their polyubiquitin chains and by interacting (via ubiquitin-like domain) with the subunits of the proteasome (PubMed:<u>10983987</u>). Plays a role in the ERAD pathway via its interaction with ER-localized proteins FAF2/UBXD8 and HERPUD1 and may form a link between the polyubiquitinated ERAD substrates and the proteasome (PubMed:<u>148307982</u>, PubMed:<u>24215460</u>). Involved in the regulation of macroautophagy and autophagosome formation; required for maturation of autophagy-related protein LC3 from the cytosolic form LC3-I to the membrane-bound form LC3-II and may assist in the maturation of autophagosomes to autolysosomes by mediating autophagosome-lysosome fusion (PubMed:<u>19148225</u>, PubMed:<u>20529957</u>). Negatively regulates the endocytosis of GPCR receptors: AVPR2 and ADRB2, by specifically reducing the rate at which receptor-arrestin complexes concentrate in clathrin-coated pits (CCPs) (PubMed:<u>18199683</u>).

Cellular Location

Cytoplasm. Nucleus. Membrane {ECO:0000250|UniProtKB:Q9QZM0} Cytoplasmic vesicle, autophagosome Note=Colocalizes with a subset of proteasomes, namely those that are cytoskeleton associated or free in the cytosol. Associated with fibers in mitotic cells.

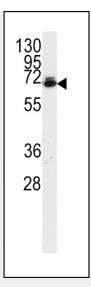
Dsk2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

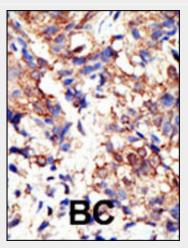
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Dsk2 Antibody (N-term) - Images

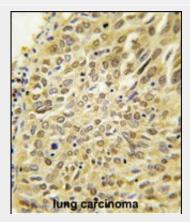




The anti-Dsk2 Pab (Cat. #AP2175a) is used in Western blot to detect Dsk2 in HeLa cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with Dsk2 Antibody (N-term) (Cat.#AP2175a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Dsk2 Antibody (N-term) - Background

Dsk2 increases the half-life of proteins destined to be degraded by the proteasome, and may modulate proteasome-mediated protein degradation. The Dsk2 protein binds UBE3A and BTRC, and interacts with the 19S proteasome subunit. In the cytoplasm, Dsk2 colocalizes with the proteasome; it is also associated with fibers in mitotic cells in the nucleus. Dsk2 is highly expressed in mitotic cells from metaphase to telophase, while expression in non-mitotic cells is very low.

Dsk2 Antibody (N-term) - References

Walters, K.J., et al., Biochemistry 41(6):1767-1777 (2002). Kleijnen, M.F., et al., Mol. Cell 6(2):409-419 (2000). Ueki, N., et al., Nat. Biotechnol. 16(13):1338-1342 (1998).