

SCRAPPER Antibody

Catalog # ASC10635

Specification

SCRAPPER Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

WB, IHC, IF Q96IG2

NP_116264, 27734755 Human, Mouse, Rat

Rabbit Polyclonal

IgG

SCRAPPER antibody can be used for detection of SCRAPPER by Western blot at 0.5 - 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20

μg/mL.

SCRAPPER Antibody - Additional Information

Gene ID **84961**

Target/Specificity

FBXL20;

Reconstitution & Storage

SCRAPPER antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

SCRAPPER Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SCRAPPER Antibody - Protein Information

Name FBXL20

Synonyms FBL2

Function

Substrate-recognition component of the SCF (SKP1-CUL1-F-box protein)-type E3 ubiquitin ligase complex. Role in neural transmission (By similarity).

Cellular Location

Cytoplasm.

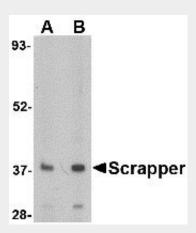


SCRAPPER Antibody - Protocols

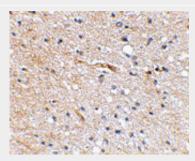
Provided below are standard protocols that you may find useful for product applications.

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

SCRAPPER Antibody - Images

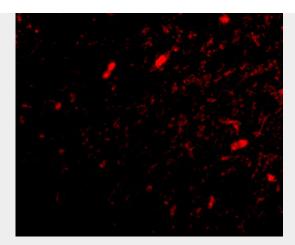


Western blot analysis of SCRAPPER in A20 cell lysate with SCRAPPER antibody at (A) 0.5 and (B) 1 μ g/mL.



Immunohistochemical staining of human brain tissue using Scrapper antibody at 2.5 μg/mL.





Immunofluorescence of scrapper in human brain tissue with scrapper antibody at 20 $\mu g/mL$.

SCRAPPER Antibody - Background

SCRAPPER Antibody: Members of the F-box protein family, such as Scrapper, are characterized by an approximately 40-amino acid F-box motif. SCF complexes, formed by SKP1, cullin, and F-box proteins, act as protein-ubiquitin ligases. Scrapper is selectively expressed in the brain, broadly expressed within the mouse CNS and is abundant at presynaptic membrane. Scrapper has orthologs in C. elegans, D. melanogaster, and mammals which suggests that it might function as an important membrane-localized E3 ligase in various species. Scrapper is a major presynaptic E3 ubiquitin ligase that acts through RIM1a via degradation and the ubiquitin-proteasome-system (UPS) pathway to critically regulate synaptic transmission. This identifies protein degradation as a mechanism for holding synaptic communication in check.

SCRAPPER Antibody - References

Ho MS, Tsai PI, and Chien CT. F-box proteins: the key to protein degradation. J. Biomed. Sci.2006; 13:181-91.

Dobie F and Craig AM. A fight for neurotransmission: SCRAPPER trashes RIM. Cell2007; 130:775-7. Yao I, Takagi H, Ageta H, et al. SCRAPPER-dependent ubiquitination of active zone protein RIM1 regulates synaptic vesicle release. Cell2007; 130:943-57.

Ding M, Chao D, Wang G, et al. Spatial regulation of an E3 ubiquitin ligase directs selective synapse elimination. Science2007; 317:947-51.