

SCRAPPER Antibody

Catalog # ASC10635

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q96IG2
Other Accession	NP_116264 , 27734755
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	48423
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	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 μ g/mL.

Additional Information

Gene ID	84961
Other Names	F-box/LRR-repeat protein 20, F-box and leucine-rich repeat protein 20, F-box/LRR-repeat protein 2-like, FBXL20, FBL2
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.

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.

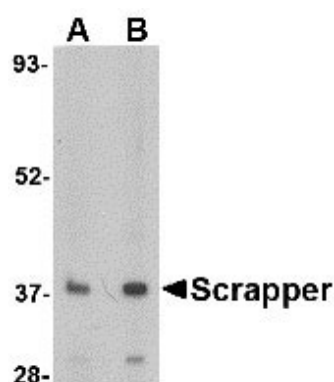
Background

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.

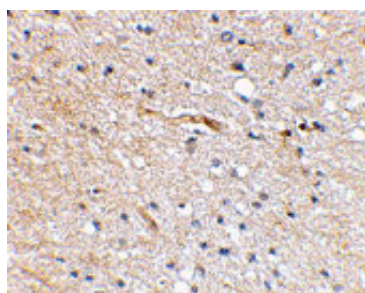
References

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. *Cell* 2007; 130:775-7.
Yao I, Takagi H, Ageta H, et al. SCRAPPER-dependent ubiquitination of active zone protein RIM1 regulates synaptic vesicle release. *Cell* 2007; 130:943-57.
Ding M, Chao D, Wang G, et al. Spatial regulation of an E3 ubiquitin ligase directs selective synapse elimination. *Science* 2007; 317:947-51.

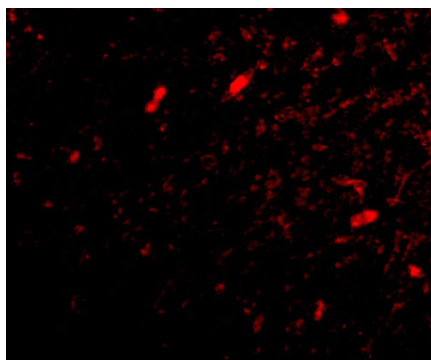
Images



Western blot analysis of SCRAPPER in A20 cell lysate with SCRAPPER antibody at (A) 0.5 and (B) 1 $\mu\text{g/mL}$.



Immunohistochemical staining of human brain tissue using Scrapper antibody at 2.5 $\mu\text{g/mL}$.



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.