10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TCC52 Antibody

Catalog # ASC11110

Product Information

Application	WB, ICC, E
Primary Accession	Q5T6F0
Other Accession	NP_056212, 22218619
Reactivity	Human, Mouse, Rat
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Calculated MW	50517
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TCC52 antibody can be used for detection of TCC52 by Western blot at 1 g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 g/mL.

Additional Information

Gene ID	25853
Other Names	DDB1- and CUL4-associated factor 12, Centrosome-related protein TCC52, Testis cancer centrosome-related protein, WD repeat-containing protein 40A, DCAF12, KIAA1892, TCC52, WDR40A
Target/Specificity	DCAF12;
Reconstitution & Storage	TCC52 antibody can be stored at 4℃ for three months and -20℃, 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	TCC52 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DCAF12 {ECO:0000303|PubMed:16949367, ECO:0000312|HGNC:HGNC:19911}
Function	Substrate-recognition component of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:16949367, PubMed:16964240, PubMed:29779948). The C- degron recognized by the DesCEND pathway is usually a motif of less than ten residues and can be present in full-length proteins, truncated proteins or

	proteolytically cleaved forms (PubMed:29779948). The DCX(DCAF12) complex specifically recognizes proteins with a diglutamate (Glu-Glu) at the C-terminus, such as MAGEA3, MAGEA6 and CCT5, leading to their ubiquitination and degradation (PubMed:29779948, PubMed:31267705). Ubiquitination of MAGEA3, MAGEA6 by DCX(DCAF12) complex is required for starvation-induced autophagy (PubMed:31267705). Also directly recognizes the C-terminal glutamate-leucine (Glu-Leu) degron as an alternative degron in proteins such as MOV10, leading to their ubiquitination and degradation. Controls the protein level of MOV10 during spermatogenesis and in T cells, especially after their activation (PubMed:34065512).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus
Tissue Location	Highly expressed in lung cancer tissues and some cancer cell lines (PubMed:18957058). Restricted expression in normal testis (PubMed:18957058).

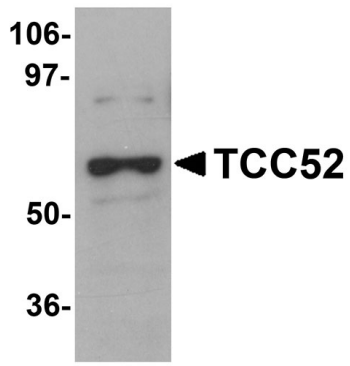
Background

TCC52 Antibody: Cancer-testis (CT) antigens are a type of antigen whose expression is highly restricted, primarily in normal testis, but aberrantly in different tumor types. Their immunogenicity in cancer patients makes them prime targets for immunotherapy of human tumors. One such CT antigen is TCC52, a novel centrosomal protein. TCC52 is a WD repeat-containing protein that interacts with the COP9 signalosome, a macromolecular complex that interacts with cullin-RING E3 ligases and regulates their activity by hydrolyzing cullin-Nedd8 conjugates. The normal biological function of this protein is not known at this time.

References

Scanlan M, Simpson A, and Old L. The cancer/testis genes: review, standardization, and commentary. Cancer Immun.2004; 4:1-15.
Xia L, Li Y, Yang D, et al. Identification of new centrosome proteins by autoimmune patient sera. Sci. China C. Life Sci.2007; 50:194-202.
Li S, Hu X, Cui S, et al. Novel centrosome protein, TCC52, is a cancer-testis antigen. Cancer Sci.2008; 11:2274-9.

Images



Western blot analysis of TCC52 in 293 cell lysate with TCC52 antibody at 1 µg/mL.

Immunocytochemistry of TCC52 in 293 cells with TCC52 antibody at 2.5 µg/mL.



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