

**Goat Anti-TRC8 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2108a****Specification**

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**Goat Anti-TRC8 Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">Q8WU17</a>
Other Accession	<a href="#">NP_009149</a> , <a href="#">11236</a>
Reactivity	Human
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	75994

**Goat Anti-TRC8 Antibody - Additional Information****Gene ID** 11236**Other Names**

E3 ubiquitin-protein ligase RNF139, 6.3.2.-, RING finger protein 139, Translocation in renal carcinoma on chromosome 8 protein, RNF139 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=17023](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=17023))  
target="\_blank">HGNC:17023</a>)

**Dilution**

WB~~1:1000  
IHC~~1:100~500  
E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-TRC8 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-TRC8 Antibody - Protein Information****Name** RNF139 ([HGNC:17023](#))

### Function

E3-ubiquitin ligase; acts as a negative regulator of cell proliferation through mechanisms involving G2/M arrest and cell death (PubMed:<a href="http://www.uniprot.org/citations/10500182" target="\_blank">10500182</a>, PubMed:<a href="http://www.uniprot.org/citations/12032852" target="\_blank">12032852</a>, PubMed:<a href="http://www.uniprot.org/citations/17016439" target="\_blank">17016439</a>). Required for MHC class I ubiquitination in cells expressing the cytomegalovirus protein US2 before dislocation from the endoplasmic reticulum (ER) (PubMed:<a href="http://www.uniprot.org/citations/19720873" target="\_blank">19720873</a>). Affects SREBP processing by hindering the SREBP-SCAP complex translocation from the ER to the Golgi, thereby reducing SREBF2 target gene expression (PubMed:<a href="http://www.uniprot.org/citations/19706601" target="\_blank">19706601</a>, PubMed:<a href="http://www.uniprot.org/citations/20068067" target="\_blank">20068067</a>). Involved in the sterol-accelerated degradation of HMGCR (PubMed:<a href="http://www.uniprot.org/citations/22143767" target="\_blank">22143767</a>, PubMed:<a href="http://www.uniprot.org/citations/23223569" target="\_blank">23223569</a>). This is achieved through binding of RNF139 to INSIG1 and/or INSIG2 at the ER membrane (PubMed:<a href="http://www.uniprot.org/citations/22143767" target="\_blank">22143767</a>). In addition, interaction of RNF139 with AUP1 facilitates interaction of RNF139 with ubiquitin-conjugating enzyme UBE2G2 and ubiquitin ligase AMFR, leading to ubiquitination of HMGCR (PubMed:<a href="http://www.uniprot.org/citations/23223569" target="\_blank">23223569</a>). The ubiquitinated HMGCR is then released from the ER into the cytosol for subsequent destruction (PubMed:<a href="http://www.uniprot.org/citations/22143767" target="\_blank">22143767</a>, PubMed:<a href="http://www.uniprot.org/citations/23223569" target="\_blank">23223569</a>). Required for INSIG1 ubiquitination (PubMed:<a href="http://www.uniprot.org/citations/20068067" target="\_blank">20068067</a>). May be required for EIF3 complex ubiquitination (PubMed:<a href="http://www.uniprot.org/citations/20068067" target="\_blank">20068067</a>).

### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

### Tissue Location

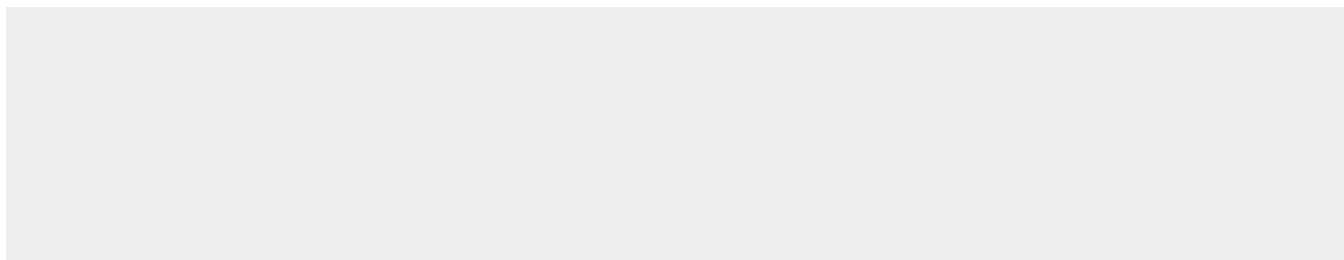
Highly expressed in testis, placenta and adrenal gland. Moderate expression in heart, brain, liver, skeletal muscle and pancreas, and low expression in lung and kidney

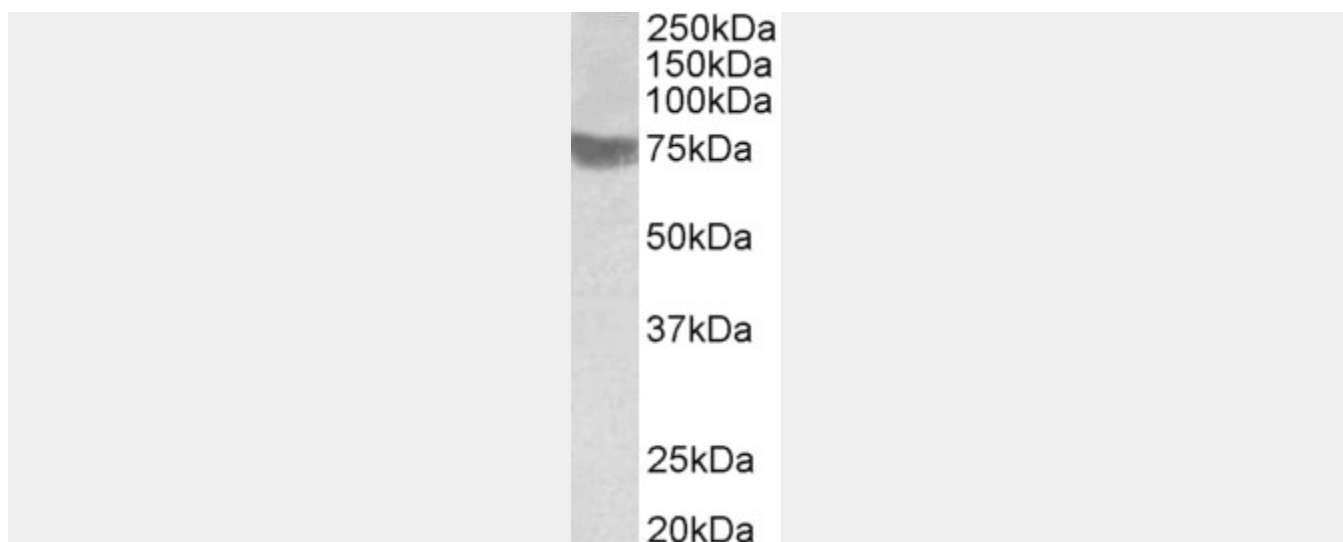
## Goat Anti-TRC8 Antibody - Protocols

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

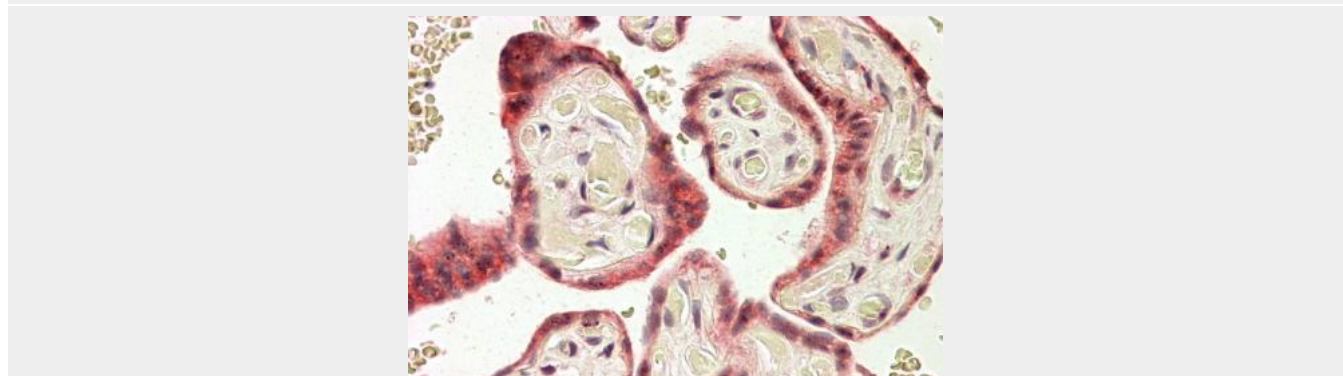
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Goat Anti-TRC8 Antibody - Images





AF2108a (1 µg/ml) staining of Human Skeletal Muscle lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2108a (3.8 µg/ml) staining of paraffin embedded Human Placenta. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

### Goat Anti-TRC8 Antibody - Background

The protein encoded by this gene is a multi-membrane spanning protein containing a RING-H2 finger. This protein is located in the endoplasmic reticulum, and has been shown to possess ubiquitin ligase activity. This gene was found to be interrupted by a t(3;8) translocation in a family with hereditary renal and non-medullary thyroid cancer. Studies of the *Drosophila* counterpart suggested that this protein may interact with tumor suppressor protein VHL, as well as with COPS5/JAB1, a protein responsible for the degradation of tumor suppressor CDKN1B/P27KIP.

### Goat Anti-TRC8 Antibody - References

The TRC8 ubiquitin ligase is sterol regulated and interacts with lipid and protein biosynthetic pathways. Lee JP, et al. *Mol Cancer Res*, 2010 Jan. PMID 20068067.  
The TRC8 E3 ligase ubiquitinates MHC class I molecules before dislocation from the ER. Stagg HR, et al. *J Cell Biol*, 2009 Sep 7. PMID 19720873.  
The sterol-sensing endoplasmic reticulum (ER) membrane protein TRC8 hampers ER to Golgi transport of sterol regulatory element-binding protein-2 (SREBP-2)/SREBP cleavage-activated protein and reduces SREBP-2 cleavage. Irisawa M, et al. *J Biol Chem*, 2009 Oct 16. PMID 19706601.  
A constitutional balanced t(3;8)(p14;q24.1) translocation results in disruption of the TRC8 gene and predisposition to clear cell renal cell carcinoma. Poland KS, et al. *Genes Chromosomes Cancer*, 2007 Sep. PMID 17539022.

Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.