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

AMFR Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2162a

Specification

AMFR Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q9UKV5
Other Accession	P26442

AMFR Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 267

Other Names
E3 ubiquitin-protein ligase AMFR, 632-, Autocrine motility factor receptor, AMF receptor, RING finger protein 45, gp78, AMFR, RNF45

Target/Specificity
The synthetic peptide sequence used to generate the antibody <a >AP2162a was selected from the C-term region of human AMFR . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AMFR Antibody (C-term) Blocking Peptide - Protein Information

Name AMFR {ECO:0000303|PubMed:10456327, ECO:0000312|HGNC:HGNC:463}

Function
E3 ubiquitin-protein ligase that mediates the polyubiquitination of lysine and cysteine residues on target proteins, such as CD3D, CYP3A4, CFTR, INSIG1, SOAT2/ACAT2 and APOB for proteasomal degradation (PubMed:10456327, PubMed:11724934, PubMed:12670940, PubMed:19103148, PubMed:24424410, PubMed:28604676). Component of a VCP/p97-AMFR/gp78 complex that participates in the final step of endoplasmic reticulum-associated degradation (ERAD) (PubMed:10456327, PubMed:<a

href="http://www.uniprot.org/citations/11724934" target="_blank">11724934, PubMed:19103148, PubMed:24424410). The VCP/p97-AMFR/gp78 complex is involved in the sterol-accelerated ERAD degradation of HMGCR through binding to the HMGCR-INSIG1 complex at the ER membrane (PubMed:16168377, PubMed:22143767). In addition, interaction of AMFR with AUP1 facilitates interaction of AMFR with ubiquitin-conjugating enzyme UBE2G2 and ubiquitin ligase RNF139, leading to sterol-induced HMGCR ubiquitination (PubMed:23223569). The ubiquitinated HMGCR is then released from the ER into the cytosol for subsequent destruction (PubMed:16168377, PubMed:22143767, PubMed:23223569). In addition to ubiquitination on lysine residues, catalyzes ubiquitination on cysteine residues: together with INSIG1, mediates polyubiquitination of SOAT2/ACAT2 at 'Cys-277', leading to its degradation when the lipid levels are low (PubMed:28604676). Catalyzes ubiquitination and subsequent degradation of INSIG1 when cells are depleted of sterols (PubMed:17043353). Mediates polyubiquitination of INSIG2 at 'Cys-215' in some tissues, leading to its degradation (PubMed:31953408). Also regulates ERAD through the ubiquitination of UBL4A a component of the BAG6/BAT3 complex (PubMed:21636303). Also acts as a scaffold protein to assemble a complex that couples ubiquitination, retranslocation and deglycosylation (PubMed:21636303). Mediates tumor invasion and metastasis as a receptor for the GPI/autocrine motility factor (PubMed:10456327). In association with LMBR1L and UBAC2, negatively regulates the canonical Wnt signaling pathway in the lymphocytes by promoting the ubiquitin-mediated degradation of CTNNB1 and Wnt receptors FZD6 and LRP6 (PubMed:31073040). Regulates NF-kappa-B and MAPK signaling pathways by mediating 'Lys-27'-linked polyubiquitination of TAB3 and promoting subsequent TAK1/MAP3K7 activation (PubMed:36593296). Required for proper lipid homeostasis (PubMed:37119330).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Note=Palmitoylation promotes localization to the peripheral endoplasmic reticulum

Tissue Location
Widely expressed..

AMFR Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

AMFR Antibody (C-term) Blocking Peptide - Images

AMFR Antibody (C-term) Blocking Peptide - Background

Autocrine motility factor (AMF) is a protein secreted by tumor cells that stimulates tumor motility. The gene for AMFR encodes a 323-amino acid polypeptide that has a single transmembrane domain

and several putative glycosylation sites. The protein sequence has some homology to human tumor protein p53.

AMFR Antibody (C-term) Blocking Peptide - References

Huang, B., et al., Biochem. Biophys. Res. Commun. 212(3):727-742 (1995).Watanabe, H., et al., J. Biol. Chem. 266(20):13442-13448 (1991).