

AMFR Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14958c

Specification

AMFR Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O9UKV5
Other Accession	NP_001135.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	72996
Antigen Region	371-400

AMFR Antibody (Center) - 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

This AMFR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 371-400 amino acids from the Central region of human AMFR.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

AMFR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AMFR Antibody (Center) - 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:[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 CTNBN1 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

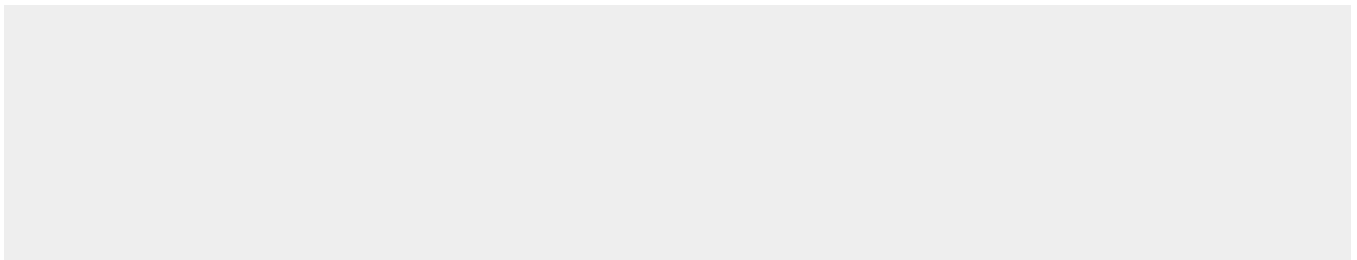
Widely expressed..

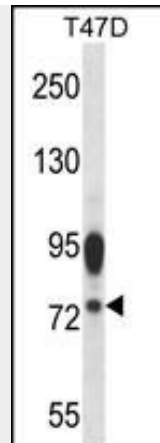
AMFR Antibody (Center) - Protocols

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](#)

AMFR Antibody (Center) - Images





AMFR Antibody (Center) (Cat. #AP14958c) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the AMFR antibody detected the AMFR protein (arrow).

AMFR Antibody (Center) - Background

Autocrine motility factor is a tumor motility-stimulating protein secreted by tumor cells. The protein encoded by this gene is a glycosylated transmembrane protein and a receptor for autocrine motility factor. The receptor, which shows some sequence similarity to tumor protein p53, is localized to the leading and trailing edges of carcinoma cells.

AMFR Antibody (Center) - References

- Joshi, B., et al. *J. Biol. Chem.* 285(12):8830-8839(2010)
- Bernardi, K.M., et al. *Mol. Biol. Cell* 21(1):140-151(2010)
- Ballar, P., et al. *Int. J. Biochem. Cell Biol.* 42(1):167-173(2010)
- Shmueli, A., et al. *Biochem. Biophys. Res. Commun.* 390(3):758-762(2009)
- Ying, Z., et al. *Hum. Mol. Genet.* 18(22):4268-4281(2009)