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Anti-AMFR Picoband Antibody

Catalog # ABO11657

Product Information

Application	WB, IHC-P
Primary Accession	Q9UKV5
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for E3 ubiquitin-protein ligase AMFR(AMFR) detection. Tested with WB, IHC-P in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	267
Other Names	E3 ubiquitin-protein ligase AMFR, 2.3.2.27, Autocrine motility factor receptor, AMF receptor, RING finger protein 45, RING-type E3 ubiquitin transferase AMFR, gp78, AMFR, RNF45
Calculated MW	72996
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Endoplasmic reticulum membrane ; Multi-pass membrane protein .
Source	Eukaryota
Protein Name	E3 ubiquitin-protein ligase AMFR
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human AMFR recombinant protein (Position: E553-S643). Human AMFR shares 89% amino acid (aa) sequence identity with mouse AMFR.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also

be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

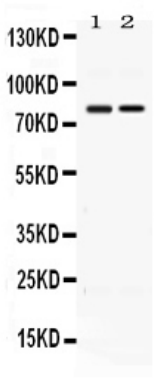
Protein Information

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 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..

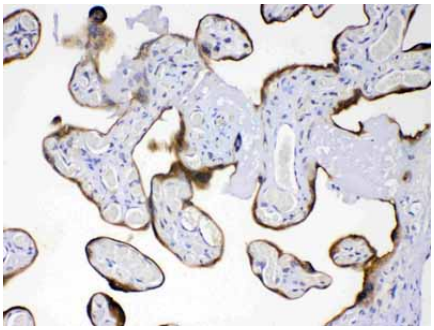
Background

Autocrine motility factor receptor, isoform 2 is a protein that in humans is encoded by the AMFR gene. 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. Its ligand, autocrine motility factor, is a tumor motility-stimulating protein secreted by tumor cells. The encoded receptor is also a member of the E3 ubiquitin ligase family of proteins. It catalyzes ubiquitination and endoplasmic reticulum-associated degradation of specific proteins.

Images



Western blot analysis of AMFR expression in rat thymus extract (lane 1) and HELA whole cell lysates (lane 2). AMFR at 78KD was detected using rabbit anti- AMFR Antigen Affinity purified polyclonal antibody (Catalog # ABO11657) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .



AMFR was detected in paraffin-embedded sections of human placenta tissues using rabbit anti- AMFR Antigen Affinity purified polyclonal antibody (Catalog # ABO11657) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .

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