

Anti-MAFA Antibody
Catalog # ABO12745**Specification****Anti-MAFA Antibody - Product Information**

Application	WB
Primary Accession	Q8NHW3
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Transcription factor MafA(MAFA) detection. Tested with WB in Human;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MAFA Antibody - Additional Information

Gene ID 389692

Other Names

Transcription factor MafA, Pancreatic beta-cell-specific transcriptional activator, Transcription factor RIPE3b1, V-maf musculoaponeurotic fibrosarcoma oncogene homolog A, MAFA

Calculated MW

36982 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Rat, Human

Subcellular Localization

Nucleus . Detected in nuclei of pancreas islet beta cells. .

Protein Name

Transcription factor MafA

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human MAFA(136-167aa EDAVEALIGSGHHGAHHGAHHHPAAAAAYEAFR), identical to the related mouse sequence.

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.

Sequence Similarities

Belongs to the bZIP family. Maf subfamily.

Anti-MAFA Antibody - Protein Information

Name MAFA

Function

Transcription factor that activates insulin gene expression (PubMed:12011435, PubMed:15993959). Acts synergistically with NEUROD1/BETA2 and PDX1 (PubMed:15993959). Binds the insulin enhancer C1/RIPE3b element (PubMed:12011435). Binds to consensus TRE-type MARE 5'-TGCTGACTCAGCA-3' DNA sequence (PubMed:23148532, PubMed:29339498).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12011435, ECO:0000269|PubMed:12917329}

Tissue Location

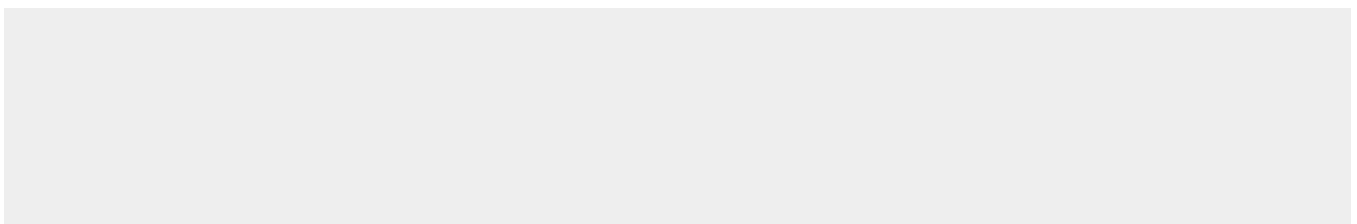
Expressed in the islets of Langerhans (at protein level).

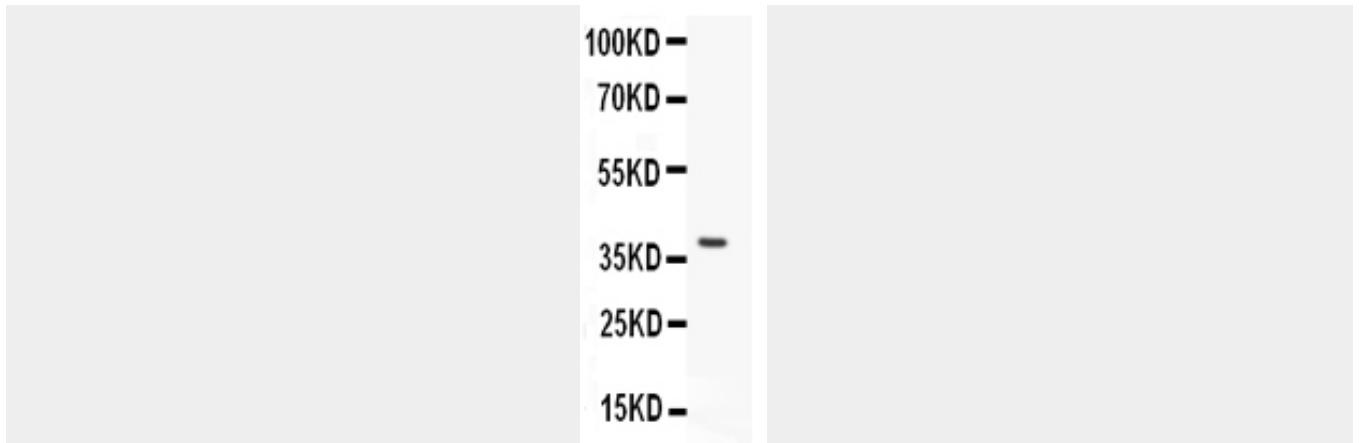
Anti-MAFA Antibody - Protocols

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](#)

Anti-MAFA Antibody - Images





Anti- MAFA antibody, ABO12745, Western blotting All lanes: Anti MAFA (ABO12745) at 0.5ug/ml WB: Rat Cardiac Muscle Tissue Lysate at 50ug Predicted bind size: 37KD Observed bind size: 37KD

Anti-MAFA Antibody - Background

MAFA is a transcription factor that binds RIPE3b, a conserved enhancer element that regulates pancreatic beta cell-specific expression of the insulin gene. MAFA plays a key role in coordinating and controlling the level of insulin gene expression in islet beta cells. It is located in 8q24.3. The intracellular domain of MAFA contains a single immunoreceptor tyrosine-based inhibitory motif (ITIM), which classifies MAFA as a member of an inhibitory receptor superfamily. The inhibitory capacity of MAFA is best defined in mast cells, where MAFA keeps in check the antigen-induced (i.e. Fc epsilon RI-induced) secretion of inflammatory mediators.