

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

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**Anti-MAFA Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q8NHW3</a>
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<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human MAFA(136-167aa EDAVEALIGSGHHGAHHGAHPAAAAAYEAFR), 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:<a href="http://www.uniprot.org/citations/12011435" target="\_blank">12011435</a>, PubMed:<a href="http://www.uniprot.org/citations/15993959" target="\_blank">15993959</a>). Acts synergistically with NEUROD1/BETA2 and PDX1 (PubMed:<a href="http://www.uniprot.org/citations/15993959" target="\_blank">15993959</a>). Binds the insulin enhancer C1/RIPE3b element (PubMed:<a href="http://www.uniprot.org/citations/12011435" target="\_blank">12011435</a>). Binds to consensus TRE-type MARE 5'-TGCTGACTCAGCA-3' DNA sequence (PubMed:<a href="http://www.uniprot.org/citations/23148532" target="\_blank">23148532</a>, PubMed:<a href="http://www.uniprot.org/citations/29339498" target="\_blank">29339498</a>).

#### Cellular Location

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

#### Tissue Location

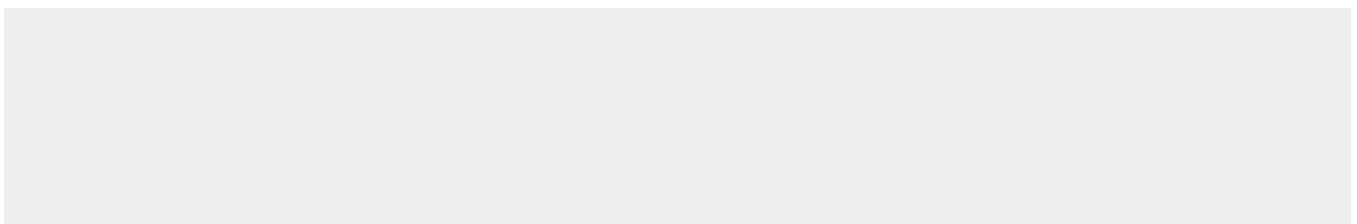
Expressed in the islets of Langerhans (at protein level).

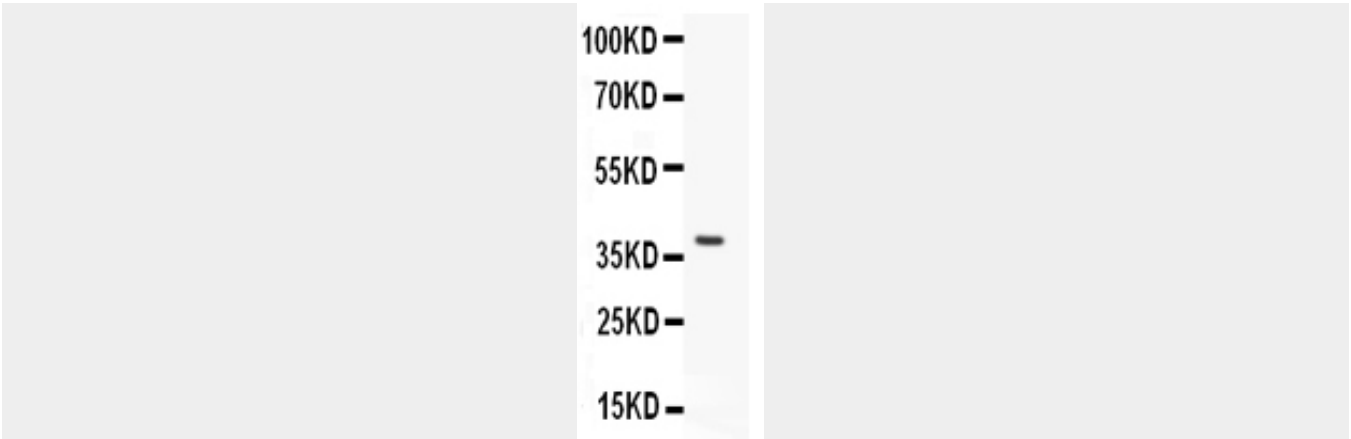
### Anti-MAFA Antibody - Protocols

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





100KD —  
70KD —  
55KD —  
35KD —  
25KD —  
15KD —

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.