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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 NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human MAFA(136-167aa EDAVEALIGSGHHGAHHGAHHPAAAAAYEAFR), 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:15993959, PubMed:12011435). 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).

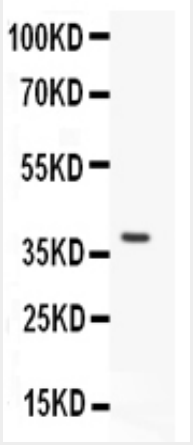
Anti-MAFA Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MAFA Antibody - Images

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Anti- MAFA antibody, ABO12745, Western blottingAll lanes: Anti MAFA (ABO12745) at 0.5ug/mlWB: Rat Cardiac Muscle Tissue Lysate at 50ugPredicted bind size: 37KDObserved 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 ofinflammatory mediators.