

Anti-MAFA Antibody

Catalog # ABO12745

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.

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
Application Details	Western blot, 0.1-0.5 µg/ml, Rat, Human
Subcellular Localization	Nucleus . Detected in nuclei of pancreas islet beta cells. .
Source	Eukaryota
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 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 reconstitution, 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.

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).

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.