

Anti-AGRP Picoband Antibody

Catalog # ABO12821

Product Information

Application	IHC-P, E
Primary Accession	P56473
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for AGRP detection. Tested with IHC-P, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	11604
Other Names	Agouti-related protein, Agrp, Agrt, Art
Calculated MW	14432
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml Direct ELISA, 0.1-0.5 µg/ml
Subcellular Localization	Secreted.
Tissue Specificity	Expressed in arcuate nucleus and median eminence, adrenal gland (medulla), hypothalamus, testis, and lung.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived mouse AGRP recombinant protein (Position: S82-T131).
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	AgRP {ECO:0000312 MGI:MGI:892013}
Synonyms	AgRT, Art
Function	Signaling protein that functions as an antagonist of melanocyte-stimulating-hormone receptors MC3R and MC4R by precluding agonist-induced signaling, thereby inhibiting cAMP production within the hypothalamus and adrenal gland (PubMed: 9892020). Involved in the control of feeding behavior via the central melanocortin system (By similarity). Has very low activity towards MC5R (PubMed: 9892020). Also promotes endocytosis of MC3R and MC4R in an arrestin-dependent mechanism (By similarity).
Cellular Location	Secreted {ECO:0000250 UniProtKB:O00253}. Golgi apparatus lumen {ECO:0000250 UniProtKB:O00253}
Tissue Location	Expressed in arcuate nucleus and median eminence, adrenal gland (medulla), hypothalamus, testis, and lung

Background

Agouti-related protein (AgRP), also called agouti-related peptide, is a neuropeptide produced in the brain by the AgRP/NPY neuron. In humans, the agouti-related peptide is encoded by the AGRP gene. This gene encodes an antagonist of the melanocortin-3 and melanocortin-4 receptor. It appears to regulate hypothalamic control of feeding behavior via melanocortin receptor and/or intracellular calcium regulation, and thus plays a role in weight homeostasis. Mutations in this gene have been associated with late on-set obesity.

Images

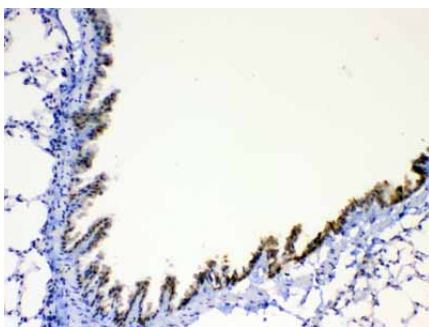


Figure 1. IHC analysis of AGRP using anti-AGRP antibody (ABO12821). AGRP was detected in paraffin-embedded section of mouse lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti-AGRP Antibody (ABO12821) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

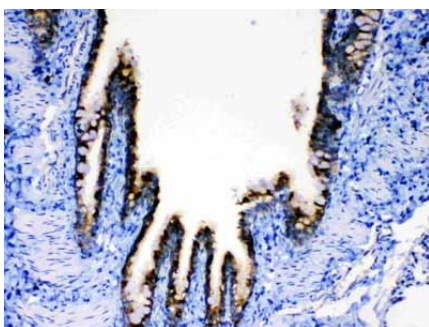


Figure 2. IHC analysis of AGRP using anti-AGRP antibody (ABO12821). AGRP was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti-AGRP Antibody (ABO12821) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

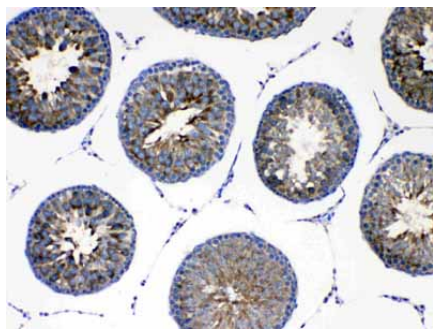


Figure 3. IHC analysis of AGRP using anti-AGRP antibody (ABO12821). AGRP was detected in paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-AGRP Antibody (ABO12821) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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