

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse AgRP in direct ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse AgRP/ART Val25-Thr131 Accession # P56473
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Agouti-Related Protein (AgRP), the protein product of the Agouti-Related Transcript (ART), is a neuroprotein that regulates energy metabolism and the development of obesity by antagonizing α -melanocyte stimulating hormone (α -MSH) action on MC-3 and MC-4 receptors (1-4). AgRP is predominantly expressed in the hypothalamus and adrenal medulla (5). Mature mouse AgRP is a 111 amino acid (aa) polypeptide; its C-terminal portion contains ten conserved cysteines that form five disulfide bonds (5, 6). Within the C-terminal region, mouse AgRP shares 80% and 90% aa sequence identity with human and rat AgRP, respectively. It also shares 44% aa sequence identity with Agouti. As with Agouti, the C-terminal cysteine-rich region is sufficient for biological activity (7). AgRP, however, is 100 times more potent than Agouti in antagonizing MC-3 and MC-4 receptors (8). AgRP also induces the β -arrestin dependent endocytosis of MC-3 and MC-4 (9). Hypothalamic expression of AgRP is upregulated in obesity and diabetes (5, 10), and chronic AgRP administration increases food intake and weight gain in rats (11). Genetically-linked polymorphisms of AgRP in humans are associated with susceptibility to anorexia nervosa (12, 13). In addition, AgRP inhibits the ACTH-induced synthesis of steroid hormones via a mechanism that does not involve melanocortin receptors (14).

PRODUCT SPECIFIC NOTICES

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