Human AgRP/ART Alexa Fluor® 350-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF704U
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human AgRP/ART in direct ELISAs and Western blots. In Western blots, approximately 40% cross-reactivity with recombinant mouse AgRP/ART is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant human AgRP/ART Ala21-Thr132 Accession # O00253
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
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 neuropeptide that regulates energy metabolism and the development of obesity by antagonizing α-melanocyte stimulating hormone (α-MSH) on MC-3 and MC-4 receptors (1 - 4). AgRP is predominantly expressed in the hypothalamus and adrenal medulla (5). Mature human AgRP is a 112 amino acid (aa) peptide; its C-terminal portion contains ten conserved cysteines that form five disulfide bonds (5, 6). Human AgRP shares 82% and 72% aa sequence identity with mouse and rat AgRP, respectively. It shares 32% aa sequence identity with Agouti. As in the case of Agouti, the C-terminal cysteine-rich region is sufficient for biological activity (7). AgRP 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 in a mechanism that does not involve melanocortin receptors (14).

PRODUCT SPECIFIC NOTICES

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