

RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rabbit Anti-Human AgRP Antibody

(Catalog No:	Isotype:	Species:	Accession No:
	130-00013	Rabbit IgG	Human	O00253

Description

Agouti-related protein also called Agouti-related peptide (AgRP) is a neuropeptide produced in the brain by the AgRP/NPY neuron. It is only synthesized in NPY containing cell bodies located in the ventromedial part of the arcuate nucleus in the hypothalamus. AgRP is co-expressed with Neuropeptide Y and works by increasing appetite and decreasing metabolism and energy expenditure. It is one of the most potent and long-lasting of appetite stimulators. In humans, the agouti-related peptide is encoded by the AGRP gene. It has been found that AgRP stimulates the hypothalamic-pituitary-adrenocortical axis to release ACTH, cortisol and prolactin. It also enhances the ACTH response to IL-1-beta, suggesting it may play a role in the modulation of neuroendocrine response to inflammation.

Applications

Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:64,000
Western Blotting	*			1: 1,000
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



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Preparation

The immunogen was a synthetic peptide. This antibody was produced from a rabbit immunized with this peptide conjugated with KLH. The IgG fraction was purified from rabbit serum by Protein G affinity chromatography.

Specificity

This antibody specifically binds to human AgRP. Cross reactivity with mouse and rat AgRP was detected.

Reconstitution

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

Storage

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 1 month at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

Reference

Bäckberg, M.; et al. (2004). "Down-regulated expression of agouti-related protein (AGRP) mRNA in the hypothalamic arcuate nucleus of hyperphagic and obese tub/tub mice". *Brain Res. Mol. Brain Res.* 125 (1-2): 129–39.

Xiao, E.; et al. (2003). "Agouti-related protein stimulates the hypothalamic-pituitary-adrenal (HPA) axis and enhances the HPA response to interleukin-1 in the primate". *Endocrinology* **144** (5): 1736–41.