

Product datasheet for **DP2005**

AGRP Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	ELISA. Western Blot. Immunohistochemistry.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Recombinant human Agouti-related protein from E.coli.
Specificity:	The antibody was raised in rabbits by immunization with the recombinant Agouti-Related Protein.
Formulation:	Azide Free, 0.05 M phosphate buffer, 0.1 M NaCl, pH 7.2 State: Aff - Purified State: Lyophilized purified IgG fraction Preservative: None
Reconstitution Method:	Add 0.05 ml of deionized water and let the lyophilized pellet dissolve completely. Slight turbidity may occur after reconstitution, which does not affect activity of the antibody. In this case clarify the solution by centrifugation.
Concentration:	1.0 mg/ml (after reconstitution)
Purification:	Immunoaffinity Chromatography on a column with immobilized recombinant Human Agouti-Related Protein
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	agouti related neuropeptide



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[O00253](#)

Background: Agouti-related protein is an endogenous antagonist of hypothalamic alpha-melanocortin receptors MC3R and MC4R with potent orexigenic activity. Although a complete deletion of the AGRP gene does not produce any significant metabolic phenotypes, reduction in AGRP expression by RNA interference is associated with increased metabolic rate along with reduced weight gain. In hypothalamus, it is produced by neurons in the medial portion of arcuate nucleus, which produce also the potent orexigenic peptide Neuropeptide Y (NP-Y). Another site of central AGRP production is the hypothalamic nucleus. AGRP encompasses 132 amino acid residues and its alpha-melanocortin inhibiting activity results in a 34 amino acid cystine knot domain within the C-terminal (87-132) portion of the protein. Both AGRP and NP-Y expression was shown to be suppressed by leptin. Central administration of AGRP induces hyperphagia and increased gain in body weight in rodents, but may also exert metabolic effects even when hyperphagia is prevented. In the absence of hyperphagia, intracerebralventricular administration of AGRP caused significant increases in plasma leptin and insulin concentrations (two-fold and 1.5-fold, respectively) and fat pad mass. In the periphery, AGRP mRNA was found in adrenal glands, lung, testis, ovary, skeletal muscle and adipose tissue in humans or rodents. In the adrenals, it was shown that AGRP antagonizes glucocorticoid production mediated by MC4R. AGRP could then modulate locally the functions of some peripheral tissues such as adrenals. In human and rat serum, detectable levels of AGRP-like activity were reported in the lower picogram range. The serum AGRP levels were elevated in obese humans compared to lean controls and increased with fasting in rats. Total 128 AA. MW: 14.4 kDa (calculated). N-Terminal His-tag, 16 extra AA (highlighted).

Synonyms: AGRT, ART

Note: **Quality Control Test**
Indirect ELISA - to determine titer of the antibody.
SDS PAGE - to determine purity of the antibody.