

## **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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## AGRP Rabbit Polyclonal Antibody - DP2005

Database Link: Entrez Gene 181 Human

<u>O00253</u>

**Background:** Agouti-related protein is an endogenous antagonist of hypothalamic alpha-melanocortin

receptors MC3R and MC4R with potent or xigenic 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 or xigenic 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 supressed 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 perifery, 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 glucosteroid 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.