



Chicken agouti-related protein (AGRP) ELISA kit (Competitive)

Cat. No.:	OB0525WXX-365
Assay Type:	Quantitative competitive ELISA
Target Species:	Chicken
Assay Target:	AGRP
Size:	48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description

Chicken agouti-related protein (AGRP) ELISA kit (Competitive) is a ready-to-use microwell, strip, or full plate ELISA kit for analyzing chicken AGRP levels with a sensitivity of 1.0 pg/mL.

Assay Principle

The AGRP ELISA Kit employs a competitive enzyme immunoassay technique utilizing a monoclonal anti-AGRP antibody and AGRP-HRP conjugate. The assay sample and buffer are incubated with the AGRP-HRP conjugate on a precoated plate for one hour. At the end of the incubation period, the wells are decanted and washed five times. The wells are then incubated with substrate for the HRP enzyme. The product of the reaction of the enzyme with the substrate forms a blue colored complex. Finally, the reaction is stopped by adding a stop solution, which turns the solution yellow. The color intensity is measured spectrophotometrically at 450 nm on a microplate reader. The color intensity is inversely proportional to the concentration of AGRP because AGRP in the sample competes with the AGRP-HRP conjugate for the binding site of the anti-AGRP antibody. Since there are a limited number of binding sites, as more sites are occupied by AGRP in the sample, fewer sites remain to bind the AGRP-HRP conjugate. A standard curve is plotted between color intensity (O.D.) and standard concentration. The concentration of AGRP in each sample is derived from this standard curve.



Background	AGRP plays a role in body weight homeostasis, is involved in the control of eating behavior through the central melanocortin system, and acts as an inverse agonist of MC3R and MC4R, thereby inhibiting their constitutive activity. Genetic variants in <i>AGRP</i> may be responsible for obesity.
Synonyms	Agouti-related peptide; ASIP2
Formula Weight	14,440 Da
Applications	Chicken agouti-related protein (AGRP) ELISA kit (Competitive) is designed for the <i>in vitro</i> quantitative analysis of AGRP levels in chicken serum, plasma, cell culture supernatants, body fluid, and tissue homogenate samples.
Research Area	Hormone research; Eating behavior; Signaling pathway; Obesity

Specification

Sample Type	Serum; Plasma; Cell culture supernatants; Body fluid; Tissue homogenate
Sensitivity	1.0 pg/mL
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 2-8°C.