

CGRP ELISA kits

CGRP (human) ELISA kit A05481

CGRP (rat) ELISA kit A05482

- Most popular kit for CGRP
- Wide dynamic range
- Quality control included



CGRP biomarker: an exciting target for migraine & headache treatment.

Calcitonin Gene Related Peptide (CGRP) is a potent vasodilator, and also elicits a number of other biological effects.

Average plasma levels of CGRP have been reported to be from 0.8 pmol/L to 71 pmol/L (3 pg/mL to 269 pg/mL) in normal subjects. Increases in circulating CGRP levels have been noticed during hemodialysis, pregnancy, exacerbation of asthma, and in cases of medullary thyroid carcinoma.

• FOCUS ON THE ASSAY

This Enzyme Immunoassay (EIA) is based on a double-antibody sandwich technique. Wells of the microtiter plate supplied with the kit are coated with a monoclonal antibody specific to CGRP. This antibody will bind any CGRP introduced in the wells (sample or standard). An acetylcholinesterase (AChE) - Fab' conjugate which binds selectively to a different epitope on the CGRP molecule, is also added to the wells. This allows the two antibodies to form a sandwich by binding on different parts of the human CGRP molecule.

The sandwich is immobilized on the plate so the excess reagents may be washed away. The concentration of the human CGRP is then determined by measuring the enzymatic activity of the AChE using Ellman's Reagent. The AChE tracer acts on the Ellman's Reagent to form a yellow compound.

The intensity of the color, which is determined by spectrophotometry, is proportional to the amount of the human CGRP present in the well during the immunological incubation.

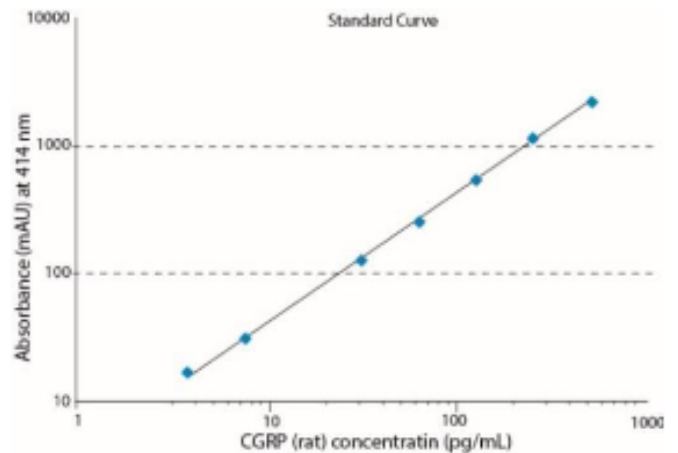
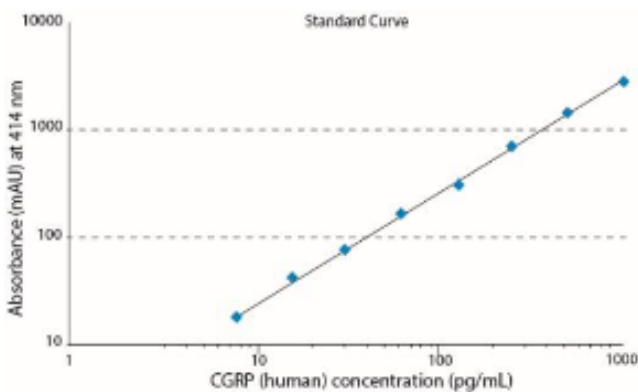
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TECHNICAL DATA

- **Size:** 96 wells
- **Shelf life:** 3 years after production
- **Shipping:** Dry ice/store at -20°C
- **Media application:** Rat or human blood, plasma, serum, and culture supernatant, nervous tissues, cerebrospinal fluid
- **Limit of detection:** 0.7 pg/mL (in EIA buffer) and 2 pg/mL (in plasma)
- **Sample volume:** 100µL (25µL when extraction is performed)
- **Standard curve range:**
 - 7.81 – 1000 pg/mL (human)
 - 3.91 – 500 pg/mL (rat)
- **Specificity for human kit:**

○ Human CGRP-I/II	100%
○ Human CGRP-a/β	100%
○ Rat CGRP-a/β	120%
○ Rat CGRP-I/II	120%
○ CGRP (8-37)	<0.01%
○ Amylin	<0.01%
○ Calcitonin	<0.01%
○ Substance P	<0.01%
- **Preanalytical phase:**
 - **Plasma/Serum:**
 - Extraction recommended for human samples
 - No extraction is required for rat samples if CGRP-free plasma or serum is used for standard curve
 - **Cerebrospinal fluid:** 1:20 dilution prior to assay
 - **Other nervous tissue:** Extraction with 2N acetic acid
 - **Other samples:** solid-phase extraction is recommended
- **Specificity for human kit:**

○ Rat CGRP-I/II	100%
○ Rat CGRP-a/β	100%
○ Human CGRP-a/β	83%
○ Human CGRP-I/II	83%
○ CGRP (8-37)	<0.01%
○ Amylin	<0.01%
○ Calcitonin	<0.01%
○ Substance P	<0.01%



RELATED PRODUCTS

- Prolactin (mouse) ELISA kit cat# A05136
- Angiotensin II SPIE-IA kit cat# A05880
- Prolactin (rat) ELISA kit cat# A05101
- Angiotensin II SPIE-IA kit cat# A05890