

CGRP (human) ELISA kit #A05481 CGRP (rat) ELISA kit #A05482

KEY INFORMATION

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



GENERAL INFORMATION

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 of 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 immobilised 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 the Ellman's Reagent. The AChE tracer acts on the Ellman's Reagent to form a yellow compound.

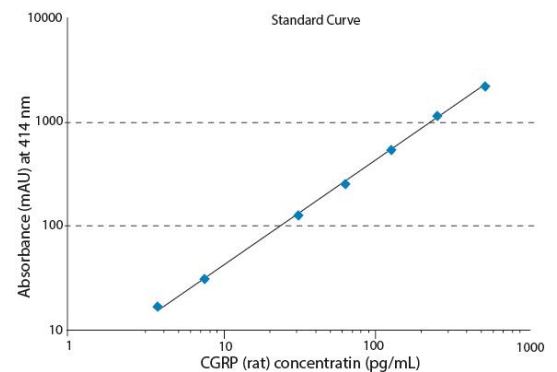
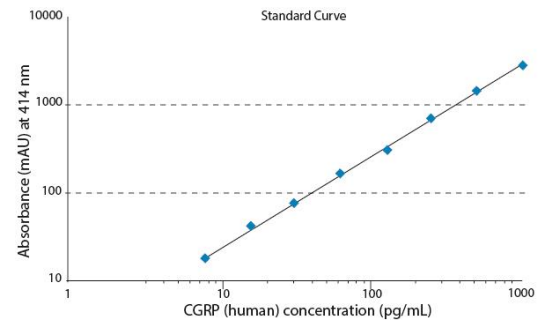
The intensity of the colour, which is determined by spectrophotometry, is proportional to the amount of the human CGRP present in the well during the immunological incubation.

TECHNICAL DATA

- Size: 96 wells
- Shelf life: 18 months after production
- Shipping: dry ice / Store at -20°C
- Media Application: Rat or human blood, plasma, serum and culture supernatant, nervous tissues, cerebrospinal fluid.
- Preanalytical phase:
 - Plasma/Serum: extraction required (for human only)
 - Plasma & serum: no extraction required if free plasma or serum used for standard curve (for rat only)
 - Cerebrospinal fluid: 1/20 dilution prior assay
 - Other nervous tissue: extraction with 2N acetic acid
 - Blood, plasma, serum & other mixtures: solid-phase extraction
- Limit of detection: 0.1 nM
- Standard Curve Range:
 - Short immunological reaction (3H RT): 0.19-25 nM
 - Plasma: Long immunological reaction (18H 4°C): 0.09-12.5 nM
- Sample volume: 50 µL
- Specificity for human kit:

Human CGRP-I/II	100 %
Human CGRP-α/β	100 %
Rat CGRP-α/β	120 %
Rat CGRP-I/II	120 %
CGRP (8-37)	<0.01 %
Amylin	<0.01 %
Calcitonin	<0.01 %
Substance P	<0.01 %
- Specificity for rat kit:

Rat CGRP-I/II	100 %
Rat CGRP-α/β	100 %
Human CGRP-α/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
 Histamine ELISA kit cat# A05890

A3048x-0118