

Human Pro-Gastrin-releasing peptide, ProGRP ELISA Kit | ProGRP elisa kit

Human Pro-Gastrin-releasing peptide, ProGRP

CATALOG #
AAA59125

REACTIVITY
Human

PRODUCT SYNONYMS

Pro-Gastrin-releasing peptide; ProGRP; Human Pro-Gastrin-releasing peptide; Human ProGastrin-releasing peptide; Pro-GRP ELISA Kit; ProGRP elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Samples	Serum, plasma, cell culture supernatants or tissue homogenate
Assay Type	Quantitative Sandwich
Detection Range	31.2 pg/ml - 2000 pg/ml
Sensitivity	2 pg/ml
Preparation and Storage	Store at 4 degree C for 6 months, or at -20 degree C for one year. Store HRP conjugated antibody at 4 degree C for one year.

IMAGES

Typical Data & Standard Curve

Results of a typical standard run of a human ProGRP ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

X	pg/ml	0	31.2	62.5	125	250	500	1000	2000
Y	OD450	0.089	0.180	0.199	0.260	0.461	0.789	1.422	2.519

Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for ProGRP elisa kit

Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-ProGRP monoclonal antibody was pre-coated onto 96-well plates. The standards and test samples were added to the wells and any ProGRP present is bound by the immobilized antibody. After washing away any unbound substances, the HRP conjugated anti-ProGRP monoclonal antibody was added to wells as detection antibodies. Following a wash to remove any unbound antibody-enzyme reagent, the TMB substrates were added to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding stop solution. The density of yellow is proportional to the ProGRP amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of ProGRP can be calculated.

Background: Progastrin-releasing peptide (proGRP) is a recently identified biomarker of small cell lung cancer (SCLC). Plasma proGRP level could be a useful monitoring biomarker for patients with SCLC and the initial level may help with SCLC tumor staging. ProGRP was highly expressed in NCI-H446 cells and xenograft tissue. It could be used as a marker for quality control in sample processing and storage in biobanks. Korse CM1 et al study concluded that a high-risk proGRP level (more than twice the upper reference value) in patients with well-differentiated neuroendocrine tumours, WDNETs is a strong indication for a primary tumour in the lung. Besides CgA, proGRP is a complementary tumour marker for prognosis and treatment monitoring in patients with neuroendocrine tumour.

References

Oh HJ, Park HY, Kim KH, Park CK, Shin HJ, Lim JH, Kwon YS, Oh IJ, Kim YI, Lim SC, Kim YC, Kim SH, Shin MG. Progastrin-releasing peptide as a diagnostic and therapeutic biomarker of small cell lung cancer. J Thorac Dis. 2016 Sep;8(9):2530-2537. Hong Z, Shi Y, Liu Z, Zhou X, Yang Y, Tang J. Preliminary radioimmunoimaging and biodistribution of iodine-labeled single-chain antibody fragment against progastrin-releasing peptide (31-98) in small cell lung cancer xenografts. Chin Med J (Engl). 2014;127(11):2007-11. Kim SY, Kim JS, Hwang SH, Park HK, Lee JH, Lee DH, Hah SS, Park do Y. Progastrin-releasing peptide is a candidate marker for quality control in clinical sample processing and storage. Am J Clin Pathol. 2012 Feb;137(2):277-82. Korse CM1, Taal BG, Bonfrer JM, Vincent A, van Velthuisen ML, Baas P. An elevated progastrin-releasing peptide level in patients with well-differentiated neuroendocrine tumours indicates a primary tumour in the lung and predicts a shorter survival. Ann Oncol. 2011 Dec;22(12):2625-30.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/pro-gastrin-releasing-peptide-progrp/59125>