

Product datasheet

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ARG82105 Rat FGF23 ELISA Kit Package: 96 wells Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82105-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82105-002	Standard	2 X 10 ng/vial	4°C
ARG82105-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82105-004	Antibody conjugate concentrate (100X)	1 vial (100 μl)	4°C
ARG82105-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82105-006	HRP-Streptavidin concentrate (100X)	1 vial (100 μl)	4°C
ARG82105-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82105-008	25X Wash buffer	20 ml	4°C
ARG82105-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82105-010	STOP solution	10 ml (Ready to use)	4°C
ARG82105-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82105 Rat FGF23 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat FGF23 in

serum, plasma (heparin, EDTA) and cell culture supernatants.

Tested Reactivity Rat
Tested Application ELISA

Specificity There is no detectable cross-reactivity with other relevant proteins.

Target Name FGF23
Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 7.8 pg/ml

Sample Type Serum, plasma (heparin, EDTA) and cell culture supernatants.

Standard Range 15.6 - 1000 pg/ml

Sample Volume $100 \ \mu l$

Precision Intra-Assay CV: 4.9%; Inter-Assay CV: 6.5%

Alternate Names ADHR; Phosphatonin; HPDR2; FGFN; Tumor-derived hypophosphatemia-inducing factor; PHPTC;

FGF-23; Fibroblast growth factor 23; HYPF

Application Instructions

Assay Time

~ 5 hours

Properties

Form

96 well

Storage instruction

Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual

for detail temperatures of the components.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

FGF23

Gene Full Name

fibroblast growth factor 23

Background

This gene encodes a member of the fibroblast growth factor family of proteins, which possess broad mitogenic and cell survival activities and are involved in a variety of biological processes. The product of this gene regulates phosphate homeostasis and transport in the kidney. The full-length, functional protein may be deactivated via cleavage into N-terminal and C-terminal chains. Mutation of this cleavage site causes autosomal dominant hypophosphatemic rickets (ADHR). Mutations in this gene are also associated with hyperphosphatemic familial tumoral calcinosis (HFTC). [provided by RefSeq, Feb 2013]

Function

Regulator of phosphate homeostasis. Inhibits renal tubular phosphate transport by reducing SLC34A1 levels. Upregulates EGR1 expression in the presence of KL (By similarity). Acts directly on the parathyroid to decrease PTH secretion (By similarity). Regulator of vitamin-D metabolism. Negatively regulates osteoblast differentiation and matrix mineralization. [UniProt]

Highlight

Related products:

FGF23 antibodies; FGF23 ELISA Kits; FGF23 recombinant proteins;

New ELISA data calculation tool: Simplify the ELISA analysis by GainData

PTM

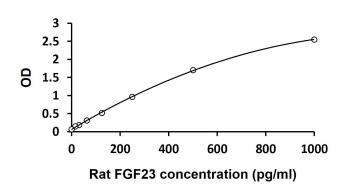
Following secretion this protein is inactivated by cleavage into a N-terminal fragment and a C-terminal fragment. The processing is effected by proprotein convertases.

O-glycosylated by GALT3. Glycosylation is necessary for secretion; it blocks processing by proprotein convertases when the O-glycan is alpha 2,6-sialylated. Competition between proprotein convertase cleavage and block of cleavage by O-glycosylation determines the level of secreted active FGF23. [UniProt]

[Ur

Cellular Localization

Secreted. Note=Secretion is dependent on O-glycosylation. [UniProt]



ARG82105 Rat FGF23 ELISA Kit standard curve image

ARG82105 Rat FGF23 ELISA Kit results of a typical standard run with optical density reading at 450 nm.