

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 µl

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

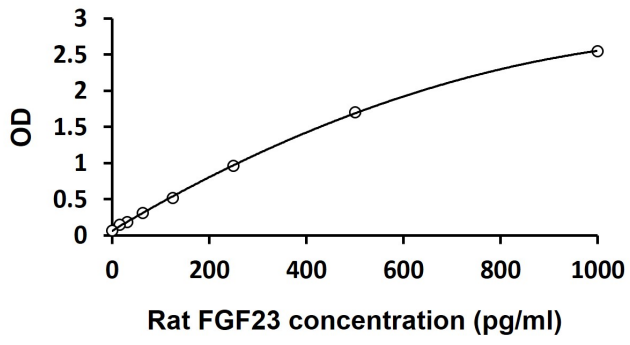
Assay Time	~ 5 hours
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Properties

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]
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.