

ARG81791 Rat RAGE ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81791-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81791-002	Standard	2 X 10 ng/vial	4°C
ARG81791-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81791-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81791-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81791-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81791-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81791-008	25X Wash buffer	20 ml	4°C
ARG81791-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81791-010	STOP solution	10 ml (Ready to use)	4°C
ARG81791-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81791 Rat RAGE ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat RAGE 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	RAGE
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	39 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	78 - 5000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 5.8%; Inter-Assay CV: 7.1%
Alternate Names	Receptor for advanced glycosylation end products; Advanced glycosylation end product-specific receptor; RAGE

Application Instructions

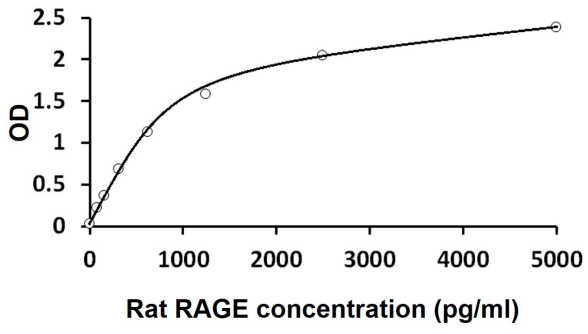
Assay Time	~ 5 hours
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Properties

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	AGER
Gene Full Name	advanced glycosylation end product-specific receptor
Background	RAGE: Advanced glycosylation end product (AGE) receptor is a member of the immunoglobulin superfamily of cell surface receptors. It is a multiligand receptor, and besides AGE, interacts with other molecules implicated in homeostasis, development, and inflammation, and certain diseases, such as diabetes and Alzheimer's disease. Many alternatively spliced transcript variants encoding different isoforms, as well as non-protein-coding variants, have been described for this gene (PMID:18089847). [provided by RefSeq, May 2011]
Function	RAGE Mediates interactions of advanced glycosylation end products (AGE). These are nonenzymatically glycosylated proteins which accumulate in vascular tissue in aging and at an accelerated rate in diabetes. Acts as a mediator of both acute and chronic vascular inflammation in conditions such as atherosclerosis and in particular as a complication of diabetes. AGE/RAGE signaling plays an important role in regulating the production/expression of TNF-alpha, oxidative stress, and endothelial dysfunction in type 2 diabetes. Interaction with S100A12 on endothelium, mononuclear phagocytes, and lymphocytes triggers cellular activation, with generation of key proinflammatory mediators. Interaction with S100B after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling. Receptor for amyloid beta peptide. Contributes to the translocation of amyloid-beta peptide (ABPP) across the cell membrane from the extracellular to the intracellular space in cortical neurons. ABPP-initiated RAGE signaling, especially stimulation of p38 mitogen-activated protein kinase (MAPK), has the capacity to drive a transport system delivering ABPP as a complex with RAGE to the intraneuronal space. Can also bind oligonucleotides. [UniProt]
Highlight	Related products: RAGE antibodies ; RAGE ELISA Kits ; New ELISA data calculation tool: Simplify the ELISA analysis by GainData



ARG81791 Rat RAGE ELISA Kit standard curve image

ARG81791 Rat RAGE ELISA Kit results of a typical standard run with optical density reading at 450 nm.