

Datasheet for ABIN921104

RAGE ELISA Kit[Go to Product page](#)**1** Image**1** Publication

Overview

Quantity:	96 tests
Target:	RAGE (AGER)
Binding Specificity:	AA 24-344
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	78-5000 pg/mL
Minimum Detection Limit:	78 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human RAGE
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q24-A344
Specificity:	Expression system for standard: NSO Immunogen sequence: Q24-A344
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	RAGE (AGER)
Alternative Name:	AGER (AGER Products)
Background:	<p>Background: RAGE, the Receptor for Advanced Glycation Endproducts, is a 35kD transmembrane receptor of the immunoglobulin super family. It is also known as AGER. AGER gene is mapped to chromosome 6p21.3 by mapping by contiguous cosmids and YAC clones and by fluorescence in situ hybridization. The expression of RAGE is particularly increased in neurons close to deposits of amyloid beta peptide and to neurofibrillary tangles. RAGE has been linked to several chronic diseases, which are thought to result from vascular damage. The pathogenesis is hypothesized to include ligand binding upon which RAGE signals activation of the nuclear factor kappa B(NF-kappaB).</p> <p>Synonyms: cDNA FLJ56412, highly similar to Advanced glycosylation end product-specific receptor ,</p> <p>Full Gene Name: advanced glycosylation end product-specific receptor</p>
Gene ID:	177
UniProt:	B4DNX3
Pathways:	Carbohydrate Homeostasis , Toll-Like Receptors Cascades , Smooth Muscle Cell Migration , S100 Proteins

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Plate:	Pre-coated
Protocol:	human Rage ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Rage has been precoated onto 96-well plates. Standards(NSO, Q24-A344) and test samples are added to the wells, a biotinylated

Application Details

detection polyclonal antibody from goat specific for Rage is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Rage amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL, 78pg/mL human Rage standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernatants, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human Rage standard solution and each sample is measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 587, Standard deviation: 37, CV(%): 6.3
- Sample 2: n=16, Mean(pg/ml): 1624, Standard deviation: 87.7, CV(%): 5.4
- Sample 3: n=16, Mean(pg/ml): 3265, Standard deviation: 150.2, CV(%): 4.6,
- Sample 1: n=24, Mean(pg/ml): 592, Standard deviation: 46.77, CV(%): 7.9
- Sample 2: n=24, Mean(pg/ml): 1660, Standard deviation: 124.5, CV(%): 7.5
- Sample 3: n=24, Mean(pg/ml): 3347, Standard deviation: 231, CV(%): 6.9

Restrictions: For Research Use only

Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

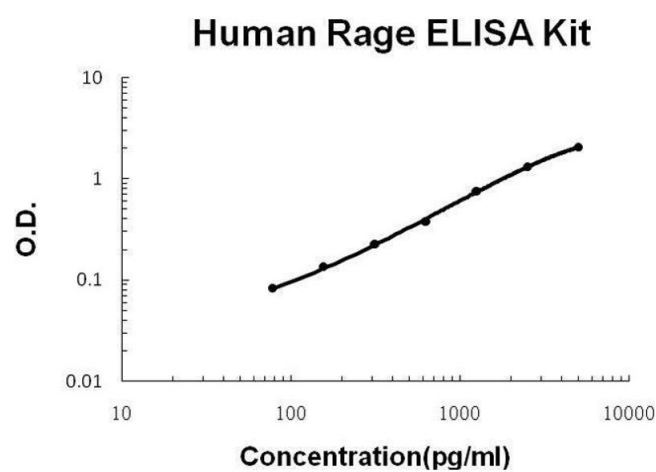
Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months

Publications

Product cited in: Mateeva, Gangapuram, Mazzio, Eyunni, Soliman, Redda: "Biological evaluation of synthetic chalcone and flavone derivatives as anti-inflammatory agents." in: **Medicinal chemistry research : an international journal for rapid communications on design and mechanisms of action of biologically active agents**, Vol. 24, Issue 4, pp. 1672-1680, (2015) ([PubMed](#)).



ELISA

Image 1. Human Rage PicoKine ELISA Kit standard curve