

# Human Keratin, type I cytoskeletal 12 (KRT12) ELISA Kit



Catalog No: #EK10184

Orders: order@signalwayantibody.com

Package Size: #EK10184-1 48T #EK10184-2 96T

Support: tech@signalwayantibody.com

## Description

Product Name	Human Keratin, type I cytoskeletal 12 (KRT12) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	K12;
Accession No.	Q99456
Uniprot	Q99456
GeneID	3859;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.058 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate KRT12 in samples. An antibody specific for KRT12 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyKRT12 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for KRT12 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of KRT12 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Keratin 12 is a keratin found expressed in corneal epithelia. Mutations in the gene encoding this protein lead to Meesmann corneal dystrophy. To elucidate the function of keratin 12, Kao et al. (1996) created knockout mice lacking the Krt1.12 gene by gene targeting techniques. The heterozygous mice appeared normal. Homozygous mice developed normally and suffered mild corneal epithelial erosion. The corneal epithelia were fragile and could be removed by gentle rubbing of the eyes or brushing. The corneal epithelium of the homozygotes did not express keratin 12 as judged by immunohistochemistry, Western immunoblot analysis with epitope-specific anti-keratin 12 antibodies, Northern hybridization, and in situ hybridization with an antisense keratin 12 riboprobe.

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Note: This product is for in vitro research use only