

Human Protein-arginine deiminase type-1 (PADI1) ELISA Kit



Catalog No: #EK8682

Orders: order@signalwayantibody.com

Package Size: #EK8682-1 48T #EK8682-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Human Protein-arginine deiminase type-1 (PADI1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	HPAD10; PAD1; PDI; PDI1; hPAD-colony 10 peptidylarginine deiminase type I protein-arginine deiminase type-1
Accession No.	Q9ULC6
Uniprot	Q9ULC6
GeneID	29943;
Storage	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. 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).

Application Details

Detect Range:31.25-2000 pg/mL

Sensitivity:16.8 pg/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:Sandwich Test principle: This assay employs a two-site sandwich ELISA to quantitate PADI1 in samples. An antibody specific for PADI1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any PADI1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PADI1 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 PADI1 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:Peptidyl arginine deiminase, type I, also known as PADI1, is a member of the peptidyl arginine deiminase family of enzymes, which catalyze the post-translational deimination of proteins by converting arginine residues into citrullines in the presence of calcium ions. The family members have distinct substrate specificities and tissue-specific expression patterns.

The type I enzyme is involved in the late stages of epidermal differentiation, where it deiminates filaggrin and keratin K1, which maintains hydration of the stratum corneum, and hence the cutaneous barrier function. This enzyme may also play a role in hair follicle formation. This gene exists in a cluster with four other paralogous genes.

Note: This product is for in vitro research use only