## **Product Datasheet**

## Human Skeletal muscle Actinin-α2 (ACTN2) ELISA Kit

Catalog No: #EK7687



Package Size: #EK7687-1 48T #EK7687-2 96T

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	
Product Name	Human Skeletal muscle Actinin-α2 (ACTN2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	CMD1AA; F-actin cross-linking protein alpha-actinin skeletal muscle
Accession No.	P35609
Uniprot	P35609
GeneID	88;
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:0.312-20 ng/mL	
Sensitivity:0.122 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 ACTN2 in samples. An antibody specific for ACTN2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyACTN2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ACTN2 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 ACTN2 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins.

Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. Studies have also implicated alpha actinin in the binding of cardiac ion channels, Kv1.5 in particular.

Note: This product is for in vitro research use only