Mouse Alpha-actinin-3 (ACTN3) ELISA Kit

Catalog No: #EK7689

Package Size: #EK7689-1 48T #EK7689-2 96T



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

D	es	cri	pt	ίO	n

Product Name	Mouse Alpha-actinin-3 (ACTN3) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	MGC117002; MGC117005;
Accession No.	O88990
Uniprot	O88990
GeneID	11474;
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:1.56-100 ng/mL			
Sensitivity:0.62 ng/mL			
Sample Type:Serum, Plasma, Oth	er 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 ACTN3 in samples. An antibody specific for ACTN3 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyACTN3 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ACTN3 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 ACTN3 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Actinin, alpha 3, also known as ACTN3, is a protein which in humans is encoded by the ACTN3 gene.Alpha-actinin is an actin-binding protein with multiple roles in different cell types. This gene expression is limited to skeletal muscle. It is localized to the Z-disc and analogous dense bodies, where it helps to anchor the myofibrillar actin filaments.

Skeletal muscle is composed of long cylindrical cells called muscle fibers. There are two types of muscle fibers, slow twitch or muscle contraction (type I) and fast twitch (type II). Slow twitch fibers are more efficient in using oxygen to generate energy whilst fast twitch fibers are less efficient. However, fast twitch fibers fire more rapidly and generate more force.

Note: This product is for in vitro research use only