

## Human Myosin-10 (MYH10) ELISA Kit

Catalog No: #EK11211



Package Size: #EK11211-1 48T #EK11211-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Human Myosin-10 (MYH10) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	MGC134913; MGC134914; NMMHCB; cellular myosin heavy chain; type B type B myosin heavy chain; nonmuscle type B myosin; heavy polypeptide 10; non-muscle near to the ATP binding region nonmuscle myosin
Accession No.	P35580
Uniprot	P35580
GeneID	4628;
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:0.055 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200  $\mu$ L

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 MYH10 in samples. An antibody specific for MYH10 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyMYH10 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for MYH10 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 MYH10 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:Myh10 was abundantly expressed in mouse brain and testis. It was also expressed in heart, lung, liver, and kidney, but not in skeletal muscle or spleen.Actin-activated MgATPase activity was decreased in MYH10 with either an asn97-to-lysine substitution, which is homologous to the N93K mutation in MYH9 that causes May-Hegglin anomaly , or an arg709-to-cysteine substitution, which causes developmental defects in brain and heart when present in mouse Myh10. The ability of MYH10 heavy meromyosin to support the movement of actin filaments over an MYH10-coated surface was reduced in heavy meromyosin with the N97K mutation and eliminated with the R709C mutation. Kinetic analysis indicated that the R709C mutation resulted in extremely tight affinity between MYH10 heavy meromyosin and ADP, reducing the rate of ADP release.

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Note: This product is for in vitro research use only