Rat Reactive oxygen species modulator 1 (ROMO1) ELISA Kit

Catalog No: #EK11941

Package Size: #EK11941-1 48T #EK11941-2 96T

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

Description

Product Name	Rat Reactive oxygen species modulator 1 (ROMO1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	RP11-353C18.54; C20orf52; MGC111180; MTGMP; bA353C18.2; OTTHUMP00000062052|OTTHUMP00000196684|mitochondrial targeting GXXXG protein
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:Request Information

Sensitivity:Request Information

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 ROMO1 in samples. An antibody specific for ROMO1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyROMO1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for ROMO1 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 ROMO1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The main source of ROS is known to be the mitochondria, and increased levels of ROS from the mitochondria have been observed in many cancer cells. Thus far, the mechanism of ROS production in cancer cell proliferation in the mitochondria is not well-understood. Romo1 increased expression of Romo1-triggered ROS production in the mitochondria. The experiments conducted in the present study showed that Romo1-derived ROS were indispensable for the proliferation of both normal and cancer cells. Furthermore, whilst cell growth was inhibited by blocking the ERK pathway in cells transfected with siRNA directed against Romo1, the cell growth was recovered by addition of exogenous hydrogen peroxide. The results of this study suggest that Romo1-induced ROS may play an important role in redox signaling in cancer cells.

Note: This product is for in vitro research use only