#### **Product Datasheet**

# Human Sodium- and chloride-dependent creatine transporter 1 (SLC6A8) ELISA Kit

Signalway Antibody

Catalog No: #EK7255

Package Size: #EK7255-1 48T #EK7255-2 96T

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

## Description

Product Name	Human Sodium- and chloride-dependent creatine transporter 1 (SLC6A8) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	CRT; CRTR; CT1; MGC87396; creatine transporter SLC6A8 sodium- and chloride-dependent creatine
	transporter 1 solute carrier family 6 member 8
Accession No.	P48029
Uniprot	P48029
GeneID	6535;
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:0.124 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 SLC6A8 in samples. An antibody specific for SLC6A8 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySLC6A8 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC6A8 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 SLC6A8 bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview: The creatine-phosphocreatine shuttle has important functions in the temporal and spatial maintenance of the energy supply to skeletal and cardiac muscle. Muscle cells do not synthesize creatine, but take it up via a special sodium-dependent transporter, the creatine transporter (SLC6A8). In mouse skin, they found high amounts of cytosolic brain CK (CKB) coexpressed with lower amounts of ubiquitous mitochondrial CK (CKMT1B), both mainly localized in suprabasal layers of the dermis, different cell types of hair follicles, sebaceous glands, and the subcutaneous panniculus carnosus muscle. Except for sebaceous glands, these cells also expressed CRT. Ckb and Crt were upregulated about 3-fold immediately after wounding of mouse skin, whereas the amount of Ckmt1b increased 10 to 15 days after wounding.

Note: This product is for in vitro research use only