Ap-4 Complex Subunit Epsilon-1 (AP4E1) ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	AP-4 complex subunit epsilon-1 (AP4E1), ELISA Kit
Full Product Name	Mouse AP-4 complex subunit epsilon-1 (AP4E1) ELISA Kit
Product Gene Name	AP4E1 elisa kit
Species Reactivity	Mouse
Assay Type	Competitive
Samples	Serum, plasma, Cell Culture Supernatants, body fluid and tissue homogenate
Detection Range	100-2500pg/mL
Sensitivity	1.0pg/mL
Preparation and Storage	Store all reagents at 2-8 degree C.
Molecular Weight	119,482 Da
OMIM	gene 613744
Sample Preparation	We suggest pre-experimenting with neat (undiluted) samples, 1:2 or 1:4 dilutions. Please avoid diluting your samples more than 1:10 as it would exceed the dilution limit set for this kit. If the expected concentration of the target is beyond the detection range of the kit, please contact our technical support team
Product Categories/Family for AP4E1 elisa kit	Signal Transduction
ISO Certification	Manufactured in an ISO 13485:2016 Certified Laboratory.
Related Product Information for AP4E1 elisa kit	MBS7217817 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the AP-4 complex subunit epsilon-1 (AP4E1) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing AP4E1. The ELISA analytical biochemical technique of the MBS7217817 kit is based on AP4E1 antibody-AP4E1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect AP4E1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, AP4E1. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).
Other Notes	Small volumes of AP4E1 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for AP4E1. It may not necessarily be applicable to this product.

NCBI GI #	145559441
NCBI GeneID	23431
NCBI Accession #	Q9UPM8.2
UniProt Secondary Accession #	Q68D31; Q9Y588; A0AVD6; A1L4A9; A6NNX7; H0YKX4
UniProt Related Accession #	Q9UPM8
NCBI Official Full Name	AP-4 complex subunit epsilon-1

NCBI Official Synonym Full Names	adaptor-related protein complex 4, epsilon 1 subunit
NCBI Official Symbol	AP4E1
NCBI Official Synonym Symbols	CPSQ4; SPG51
UniProt Protein Name	AP-4 complex subunit epsilon-1
UniProt Synonym Protein Names	AP-4 adaptor complex subunit epsilon; Adaptor-related protein complex 4 subunit epsilon-1; Epsilon subunit of AP-4; Epsilon-adaptin
Protein Family	AP-4 complex
UniProt Gene Name	AP4E1
UniProt Entry Name	AP4E1_HUMAN
NCBI Protein Information	AP-4 complex subunit epsilon-1; epsilon-adaptin; AP-4 adaptor complex subunit epsilon; adaptor-related protein complex AP-4 epsilon; adaptor-related protein complex 4 subunit epsilon-1
NCBI Summary for AP4E1	This gene encodes a member of the adaptor complexes large subunit protein family. These proteins are components of the heterotetrameric adaptor protein complexes, which play important roles in the secretory and endocytic pathways by mediating vesicle formation and sorting of integral membrane proteins. The encoded protein is a large subunit of adaptor protein complex-4, which is associated with both clathrin- and nonclathrin-coated vesicles. Disruption of this gene may be associated with cerebral palsy. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]
UniProt Comments for AP4E1	AP4E1: Subunit of novel type of clathrin- or non-clathrin- associated protein coat involved in targeting proteins from the trans-Golgi network (TGN) to the endosomal-lysosomal system. Defects in AP4E1 are the cause of cerebral palsy spastic quadriplegic type 4 (CPSQ4). A non-progressive disorder of movement and/or posture resulting from defects in the developing central nervous system. Affected individuals manifest motor and posture impairments often associated with epilepsy and disturbances of cognition, behavior, sensation, and communication. Belongs to the adaptor complexes large subunit family. Protein type: Adaptor/scaffold Chromosomal Location of Human Ortholog: 15q21.2 Cellular Component: Golgi apparatus; membrane coat; coated pit Biological Process: vesicle-mediated transport; intracellular protein transport Disease: Spastic Paraplegia 51, Autosomal Recessive
Research Articles on AP4E1	**1.** An autosomal recessive form of spastic tetraplegic cerebral palsy with profound intellectual disability, microcephaly, epilepsy and white matter loss in a consanguineous family resulting from a homozygous deletion involving AP4E1.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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