Ap-2 Complex Subunit Sigma (AP2S1) ELISA Kit for Sheep

PRODUCT OVERVIEW

Product Name	AP-2 complex subunit sigma (AP2S1), ELISA Kit
Full Product Name	Sheep AP-2 complex subunit sigma (AP2S1) ELISA Kit
Product Gene Name	AP2S1 elisa kit
Species Reactivity	Sheep
Samples	Serum, plasma, Cell Culture Supernatants, body fluid and tissue homogenate
Preparation and Storage	Store all reagents at 2-8 degree C.
Molecular Weight	12,417 Da
OMIM	602242
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 AP2S1 elisa kit	Signal Transduction
ISO Certification	Manufactured in an ISO 13485:2016 Certified Laboratory.
Related Product Information for AP2S1 elisa kit	MBS7204088 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the AP-2 complex subunit sigma (AP2S1) 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 AP2S1. The ELISA analytical biochemical technique of the MBS7204088 kit is based on AP2S1 antibody-AP2S1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect AP2S1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, AP2S1. 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 AP2S1 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 AP2S1. It may not necessarily be applicable to this product.

NCBI GI #	51338780
NCBI GeneID	1175
NCBI Accession #	P53680.2
UniProt Secondary Accession #	O75977; Q6PK67; B2R4Z4
UniProt Related Accession #	P53680
NCBI Official Full Name	AP-2 complex subunit sigma
NCBI Official Synonym Full Names	adaptor-related protein complex 2, sigma 1 subunit
NCBI Official Symbol	AP2S1
NCBI Official Synonym Symbols	AP17; FBH3; HHC3; FBHOk; CLAPS2

UniProt Protein Name	AP-2 complex subunit sigma
UniProt Synonym Protein Names	Adaptor protein complex AP-2 subunit sigma; Adaptor-related protein complex 2 subunit sigma; Clathrin assembly protein 2 sigma small chain; Clathrin coat assembly protein AP17; Clathrin coat-associated protein AP17; HA2 17 kDa subunit; Plasma membrane adaptor AP-2 17 kDa protein; Sigma2-adaptin
Protein Family	AP-2 complex
UniProt Gene Name	AP2S1
UniProt Synonym Gene Names	AP17; CLAPS2
UniProt Entry Name	AP2S1_HUMAN
NCBI Protein Information	AP-2 complex subunit sigma; sigma2-adaptin; HA2 17 kDa subunit; clathrin coat assembly protein AP17; clathrin coat-associated protein AP17; adaptor protein complex AP-2 subunit sigma; plasma membrane adaptor AP-2 17 kDa protein; clathrin assembly protein 2 sigma small chain; adaptor-related protein complex 2 subunit sigma; clathrin-associated/assembly/adaptor protein, small 2 (17kD)
NCBI Summary for AP2S1	One of two major clathrin-associated adaptor complexes, AP-2, is a heterotetramer which is associated with the plasma membrane. This complex is composed of two large chains, a medium chain, and a small chain. This gene encodes the small chain of this complex. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]
UniProt Comments for AP2S1	AP2S1: Component of the adaptor protein complex 2 (AP-2). Adaptor protein complexes function in protein Transport via Transport vesicles in different membrane traffic pathways. Adaptor protein complexes are vesicle coat components and appear to be involved in cargo selection and vesicle formation. AP-2 is involved in clathrin-dependent endocytosis in which cargo proteins are incorporated into vesicles surrounded by clathrin (clathrin-coated vesicles, CCVs) which are destined for fusion with the early endosome. The clathrin lattice serves as a mechanical scaffold but is itself unable to bind directly to membrane components. Clathrin-associated adaptor protein (AP) complexes which can bind directly to both the clathrin lattice and to the lipid and protein components of membranes are considered to be the major clathrin adaptors contributing the CCV formation. AP-2 also serves as a cargo receptor to selectively sort the membrane proteins involved in receptor-mediated endocytosis. AP-2 seems to play a role in the recycling of synaptic vesicle membranes from the presynaptic surface. AP-2 recognizes Y-X-X-[FILMV] (Y-X-X-Phi) and [ED]-X-X-X-L-[LI] endocytosis signal motifs within the cytosolic tails of transmembrane cargo molecules. AP-2 may also play a role in maintaining normal post-endocytic trafficking through the ARF6-regulated, non-clathrin pathway. The AP-2 alpha and AP-2 sigma subunits are thought to contribute to the recognition of the [ED]-X-X-X-L-[LI] motif. Belongs to the adaptor complexes small subunit family. 2 isoforms of the human protein are produced by alternative splicing. Chromosomal Location of Human Ortholog: 19q13.32 Cellular Component: plasma membrane; AP-2 adaptor complex; cytosol Molecular Function: transporter activity; protein transporter activity Biological Process: negative regulation of epidermal growth factor receptor signaling pathway; epidermal growth factor receptor signaling pathway; axon guidance; synaptic transmission; intracellular protein transport; clathrin cage assembly; viral reproduction; nerve growth factor receptor signaling pathway; regulation of endocytosis; ephrin receptor signaling pathway; antigen processing and presentation of exogenous peptide antigen via MHC class II; regulation of defense response to virus by virus Disease: Hypocalciuric Hypercalcemia, Familial, Type Iii
Research Articles on AP2S1	**1.** None of the 60 patients presented with nucleotidic changes or copy number variation in the AP2S1 gene, thereby excluding AP2S1 defects as a frequent cause of isolated hypoparathyroidism.
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