Costimulatory Molecules B7H4 (B7-H4) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Costimulatory Molecules B7H4 (B7-H4), ELISA Kit
Full Product Name	Human Costimulatory Molecules B7H4 ELISA Kit
Product Gene Name	B7-H4 elisa kit
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Detection Range	5.0ng/ml-160ng/ml
Sensitivity	1.0ng/ml
Preparation and Storage	Store all reagents at 2-8 degree C
Inter-assay Precision	Inter-assay CV (%) is less than 15%. [CV(%) = SD/mean ×100]. All CV% should be compared by concentration, not compared by OD values.
Intra-assay Precision	Intra-assay CV (%) is less than 15%.
Molecular Weight	30,878 Da
Chromosome Location	Chromosome: 1; NC_000001.10 (117686209..117753582, complement). Location: 1p13.1
OMIM	608162
3D Structure	ModBase 3D Structure for Q7Z7D3
Related Product Information for B7-H4 elisa kit	Background: This Quantitative Sandwich ELISA kit is for lab reagent/research use only, not for drug, household, therapeutic or test applications! This kit is intended to be used to determine the level of B7-H4 (hereafter termed "analyte") in undiluted original Human serum, plasma or tissue homogenates samples. For other sample types please contact tech support to determine compatibility with this assay. This kit is not suitable for assaying non-biological sources of substances.
Other Notes	Small volumes of B7-H4 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.
Searchable Terms for B7-H4 purchase	MBS018107 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Costimulatory Molecules B7H4 (B7-H4) 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 B7-H4. The ELISA analytical biochemical technique of the MBS018107 kit is based on B7-H4 antibody-B7-H4 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect B7-H4 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, B7-H4. 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(%).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for B7-H4. It may not necessarily be applicable to this product.

NCBI GI #	70997756
NCBI GeneID	79679
NCBI Accession #	AAZ17406.1
UniProt Primary Accession #	Q7Z7D3

UniProt Secondary Accession #	Q0GN76; Q45VN0; Q5WPZ3; Q6P097; Q9H6B2
UniProt Related Accession #	Q7Z7D3
NCBI Official Full Name	B7-H4
NCBI Official Synonym Full Names	V-set domain containing T cell activation inhibitor 1
NCBI Official Symbol	VTCN1
NCBI Official Synonym Symbols	B7X; B7H4; B7S1; B7-H4; B7h.5; VCTN1; PRO1291; RP11-229A19.4
UniProt Protein Name	V-set domain-containing T-cell activation inhibitor 1
UniProt Synonym Protein Names	B7h.5; Immune costimulatory protein B7-H4; Protein B7S1; T-cell costimulatory molecule B7x
UniProt Gene Name	VTCN1
UniProt Synonym Gene Names	B7H4
UniProt Entry Name	VTCN1_HUMAN
NCBI Protein Information	V-set domain-containing T-cell activation inhibitor 1; B7 family member, H4; B7 superfamily member 1; T cell costimulatory molecule B7x; T-cell costimulatory molecule B7x; immune costimulatory protein B7-H4
NCBI Summary for B7-H4	This gene encodes a protein belonging to the B7 costimulatory protein family. Proteins in this family are present on the surface of antigen-presenting cells and interact with ligand bound to receptors on the surface of T cells. Studies have shown that high levels of the encoded protein has been correlated with tumor progression. A pseudogene of this gene is located on chromosome 20. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]
UniProt Comments for B7-H4	VTCN1: Negatively regulates T-cell-mediated immune response by inhibiting T-cell activation, proliferation, cytokine production and development of cytotoxicity. When expressed on the cell surface of tumor macrophages, plays an important role, together with regulatory T-cells (Treg), in the suppression of tumor- associated antigen-specific T-cell immunity. Involved in promoting epithelial cell transformation. Belongs to the immunoglobulin superfamily. BTN/MOG family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral Chromosomal Location of Human Ortholog: 1p13.1 Cellular Component: integral to membrane; external side of plasma membrane Molecular Function: receptor binding Biological Process: response to protozoan; immune system process; positive regulation of T cell proliferation; negative regulation of T cell activation
Research Articles on B7-H4	**1.** B7-H4 expression in malignant tumors is useful for clinical diagnosis, and may provide a novel molecular target for cancer treatment.[review]
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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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