

Datasheet for KOA0410**Human B7-1 - CD80 ELISA Kit****Overview**

Description:	Human B7-1/CD80 AccuSignal ELISA Kit - KOA0410
Item No.:	KOA0410
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	62.5 pg/ml - 4000 pg/ml

Product Details

Background:	The protein CD80(Cluster of Differentiation 80) is a molecule found on activated B cells and monocytes which provides a costimulatory signal necessary for T cell activation and survival. It is also known as B7-1. The cDNA for B7-1 predicts a type I membrane protein, i.e., one synthesized with a signal peptide that is cleaved upon translocation across the endoplasmic membrane. The protein is predicted to contain 2 extracellular domains structurally similar to those of Ig, a hydrophobic transmembrane region, and a short cytoplasmic domain. The CD80 and CD86 genes encode B7-1 and B7-2, respectively, which are structurally similar members of the immunoglobulin superfamily expressed on a variety of hematopoietic cell types. B7-1 and B7-2 provide a costimulatory signal to T cells by interacting with CD28 and CTLA4.
Synonyms:	Activation B7-1 antigen, B7, BB1, CD80, CD80_HUMAN, CTLA-4 counter-receptor B7.1, T-lymphocyte activation antigen CD80
Detection Kit Type:	ELISA Kit
Detection Range:	62.5 pg/ml - 4000 pg/ml
Sensitivity:	<10 pg/ml

Target Details

Gene Name:	CD80
Reactivity:	Human
Immunogen:	Expression system for standard: NSO; Immunogen sequence: V35-N242

Purity/Specificity: Natural and recombinant human CD80. There is no detectable cross-reactivity with other relevant proteins.

Relevant Links:

- [UniProtKB - P33681](#)
- [NCBI - NP_005182.1](#)
- [GeneID - 941](#)
- [KOA0410 Protocol](#)

Application Details

Tested Applications: ELISA

Application Note: Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 4000pg/ml, 2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml human CD80 standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernates or serum to each empty well. It is recommended that each human CD80 standard solution and each sample be measured in duplicate.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Formulation

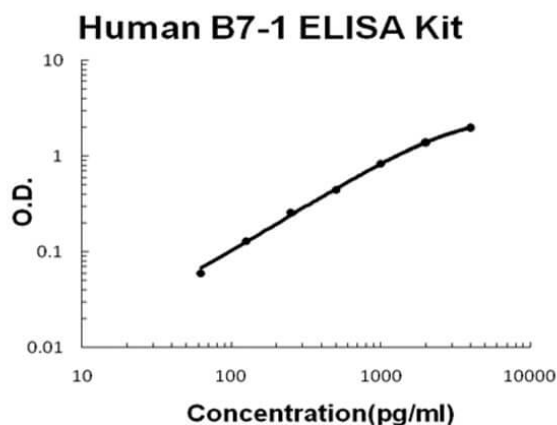
Shipping & Handling

Shipping Condition: Wet Ice

Storage Condition: Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

Expiration: See kit insert for complete instructions.

Images

**ELISA**

Human B7-1/CD80 AccuSignal ELISA Kit standard curve.

Assay Range: 62.5pg/ml-4000pg/ml. Sensitivity: <10pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.