# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 21-193aa

**UniProt No.** P25942

NCBI Accession No. NP\_001241.1

## **Alternative Names**

Tumor necrosis factor receptor superfamily member 5, B-cell surface antigen CD40, Bp50, p50, CD40L receptor, CDw40

# **PRODUCT SPECIFICATION**

## **Molecular Weight**

21.6 kDa (196aa) confirmed by MALDI-TOF

**Concentration** 0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity > 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

CD40 is a member of the TNF-receptor superfamily. This receptor has been found to be essential in mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. AT-hook transcription factor AKNA is reported to coordinately regulate the expression of this receptor and its ligand, which may be important for homotypic cell interactions. Adaptor protein TNFR2 interacts with this receptor and serves as a mediator of the



signal transduction. The interaction of this receptor and its ligand is found to be necessary for amyloid-betainduced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis. Recombinant human CD40 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

### **Amino acid Sequence**

<MGSSHHHHHH SSGLVPRGSH MGS>EPPTACR EKQYLINSQC CSLCQPGQKL VSDCTEFTET ECLPCGESEF LDTWNRETHC HQHKYCDPNL GLRVQQKGTS ETDTICTCEE GWHCTSEACE SCVLHRSCSP GFGVKQIATG VSDTICEPCP VGFFSNVSSA FEKCHPWTSC ETKDLVVQQA GTNKTDVVCG PQDRLR

### **General References**

Tone M., et al. (2001) Proc. Natl. Acad. Sci. u.S.A. 98:1751-1756 Khandekar S.S., et al. (2001) Protein Expr. Purif. 23:301-310

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.