

## Product Information

### MemDX™ Antibody Discovery - Human CD8 alpha&beta (CD8A&CD8B) Heterodimer (22-182(CD8A)&22-170(CD8B)) Membrane Protein, Partial, -His tag&Tag Free, [FITC]

Cat. No.: **MP1291F**

This product is for research use only and is not intended for diagnostic use.

This membrane protein is Human CD8 alpha&beta (CD8A&CD8B) Heterodimer (22-182(CD8A)&22-170(CD8B)). It has been tested in SDS-PAGE, ELISA. We provide this protein to facilitate your membrane protein antibody discovery and development.

#### Product Specifications

##### Host Species

Human

##### Target Protein

CD8 alpha&beta (CD8A&CD8B) Heterodimer

##### Protein Length

ECD

##### Molecular Weight

FITC-Labeled Human CD8A&CD8B Heterodimer Protein, His Tag&Tag Free, produced by co-expression of CD8 alpha and CD8 beta, has a calculated MW of 19.5 kDa (CD8 alpha) and 22.1 kDa (CD8 beta). Subunit CD8 alpha is fused with a polyhistidine tag at the C-terminus and subunit CD8 beta contains no tag. As a result of glycosylation, the heterodimer protein migrates as 30-32 kDa and 32-34 kDa under reducing (R) condition, and 30-33 kDa and 60-65 kDa under non-reducing (NR) condition (SDS-PAGE).

##### Sequence

AA Ser 22 - Asp 182 (CD8A) & Leu 22 - Pro 170 (CD8B) (Accession # P01732-1 (CD8A) & P10966-1 (CD8B)).

#### Product Description

##### Activity

Yes

##### Application

SDS-PAGE, ELISA

##### Expression Systems

HEK293

##### Tag

Subunit CD8 alpha is fused with a His tag at the C-terminus and subunit CD8 beta contains no tag

**Protein Format**

Soluble

**Form**

LYOPH

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

**Endotoxin**

<1.0 EU/µg by the LAL method

**Conjugation**

FITC

**Purity**

>90% as determined by SDS-PAGE.

**Buffer**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

**Storage**

Stored at lyophilized form at -20°C or lower. Avoid repeated freeze-thaw cycles.

The antigen can be stable for 12 months in lyophilized form after storage at -20°C to -80°C, 3 months under sterile conditions after reconstitution after storage at -80°C.

**Target****Target Protein**

CD8 alpha&beta (CD8A&CD8B) Heterodimer

**Full Name**

CD8a molecule&CD8b molecule

**Introduction**

The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen acts as a coreceptor with the T-cell receptor on the T lymphocyte to recognize antigens displayed by an antigen presenting cell in the context of class I MHC molecules. The coreceptor functions as either a homodimer composed of two alpha chains or as a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains. This gene encodes the CD8 alpha chain. Multiple transcript variants encoding different isoforms have been found for this gene. The major protein isoforms of this gene differ by the presence or absence of a transmembrane domain and thus differ in being a membrane-anchored or secreted protein. [provided by RefSeq, May 2020]; The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigens displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains. This gene encodes the CD8 beta chain isoforms. Multiple alternatively spliced transcript variants encoding distinct membrane associated or secreted isoforms have been described. A pseudogene, also located on chromosome 2, has been identified.

**Alternative Names**

CD8A, CD8a molecule, CD8, CD8 antigen, alpha polypeptide (p32) , T cell surface glycoprotein CD8 alpha chain, T-cell surface glycoprotein CD8 alpha chain, T8 T-cell antigen, T cell co-receptor, OKT8 T-cell antigen, T-cell antigen Leu2, Leu2 T-lymphocyte antigen, CD8 antigen, alpha polypeptide (p32), T-lymphocyte differentiation antigen T8/Leu-2, CD8, MAL, p32, Leu2, CD8 antigen, beta polypeptide 1 (p37), T lymphocyte surface glycoprotein beta chain

**Gene ID**

[925](#); [926](#)

**UniProt ID**

[P01732](#); [P10966](#)