

## Anti-CD8 Antibody, Mouse Monoclonal

Catalog Number: CB-C067m, 100 µg

**Introduction** CD8 (cluster of differentiation 8) is a transmembrane glycoprotein that serves as a co-receptor for the T cell receptor (TCR). Like the TCR, CD8 binds to a major histocompatibility complex (MHC) molecule, but is specific for the class I MHC protein. There are two isoforms of the protein, alpha and beta, each encoded by a different gene. In humans, both genes are located on chromosome 2 in position 2p12.

The extracellular IgV-like domain of CD8- $\alpha$  interacts with to the  $\alpha 3$  portion of the Class I MHC molecule. This affinity keeps the T cell receptor of the cytotoxic T cell and the target cell bound closely together during antigen-specific activation. Cytotoxic T cells with CD8 surface protein are called CD8+ T cells. The main recognition site is a flexible loop at the  $\alpha 3$  domain of an MHC molecule. This was discovered by doing mutational analyses. The flexible  $\alpha 3$  domain is located between residues 223 and 229 in the genome.

**Description** Mouse monoclonal antibody.

**Applications** Western blot and IHC, may be used for other applications.

**Immunogen** Synthesized peptide from C-terminal amino acids of the cytoplasmic domain of CD8 alpha chain.

**Specificity** Recognizes CD8 from human, other species not tested.

**Purification** Immunoaffinity chromatography.

**Isotype** IgG.

**Storage** Store at 4 °C; Stable for at least 6 months from the date of shipment. Non-hazardous. For long-term storage, keep at -20 °C.

**Concentration** 1 µg/µl.



IHC staining of paraffin embedded sections of human tonsils.