## anti-human CD8 APC-conjugated

APC-conjugated monoclonal antibody UCHT-4 to human CD8

Cat-No: **21620086** 500 µl

Clone: UCHT-4

**Specificity:** The UCHT-4 antibody recognises the CD8 alpha antigen on human cytotoxic/suppressor T-cells. On flow cytometry it stains 14-45% of human peripheral blood mononuclear cells. The antibody has been studied at the III. International Workshop on Human Leukocyte Differentiation Antigens.

CD8 is a TCR coreceptor molecule binding MHC class I. The CD8 antigen is expressed on human supressor/cytotoxic T-cells, human NK-cell subset, cortical thymocyte subset and granulocytes.

Isotype subclass: Mouse IgG2a/kappa

**Form:** The purified antibody is conjugated with Allophycocyanin (APC) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PPBS containing 1% BSA and 0.09% sodium azide (pH 7.2)

**Expiration date:** The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 4 °C. Do not freeze. Avoid prolonged exposure to light.

Application: Flow Cytometry.

**Background:** The **CD8** T cell coreceptor (monomer approx. 32-34 kDa) is expressed as  $\alpha\beta$  heterodimer on majority of MHC I-restricted conventional T cells and thymocytes and as  $\alpha\alpha$  homodimer on subsets of memory T cells, intraepithelial lymphocytes, NK cells and dendritic cells. Regulation of CD8 $\beta$  level on T cell surface seems to be an important mechanism to control their effector function. Assembly of CD8  $\alpha$ - $\beta$  but not  $\alpha$ - $\alpha$  dimers is connected with formation or localization to the lipid rafts. Recruiting triggered TCR complexes to these membrane microdomains as well as affinity of TCR to MHC I is modulated by CD8, thereby affecting the functional diversity of the TCR signaling.

References: 1. Beverley, P., Proceedings of the Royal Society of Edinburgh 81B: p221-232 (1982)

- 2. McMichael, A.J. et al. (eds.), Leucocyte typing III., Oxford University Press, Oxford, (1987)
- 3. Barclay, Brown et al., The Leukocyte Antigen FactsBook, 2nd edition, Harcourt Brace & Company, London, (1997)

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

## Blood lymphocytes 100 101 102 103 104

CD8-APC

Attention! Cells from one healthy individual are shown. Cell Populations and staining intensity may vary interindividually.

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