

## Anti-Mouse CD25 SAFIRE Purified

Catalog Number :07312-25

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** PC61.5

**Format/Conjugate:** SAFIRE Purified

**Concentration:** 2 mg/mL

**Reactivity:** Mouse

**Laser:** Not Applicable

**Peak Emission:** Not Applicable

**Peak Excitation:** Not Applicable

**Filter:** Not Applicable

**Brightness (1=dim,5=brightest):** Not Applicable

**Isotype:** Rat IgG1, lambda

**Formulation:** Phosphate-buffered aqueous solution, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC, FA, IHC, IP

### Description

The PC61.5 antibody specifically reacts with mouse CD25, the 55 kDa low-affinity Interleukin-2 Receptor  $\alpha$  chain (IL-2R  $\alpha$ ), expressed on early progenitors of T and B lineage, and on B and T cells. Together with CD122 (IL-2 Receptor  $\beta$ ) and CD 132 (IL-2 Receptor  $\gamma$ c, the common gamma chain), CD25 forms high-affinity receptor complexes for IL-2. Resting B and T cells and natural killer cells do not express IL-2R $\alpha$ . Cd25 is also expressed on the dendritic cells, and it enhances lymphocyte differentiation and activation.

The PC61.5 antibody blocks the binding of IL-2 to both high-affinity and low-affinity receptors.

### Preparation & Storage

The product should be stored undiluted at 4°C. Do not freeze. The monoclonal antibody was purified utilizing affinitychromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/ $\mu$ g of the protein.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. It is recommended that the reagent be titrated for optimal performance for each application.

### References

- Hayashi, T., Hasegawa, K., Adachi, C. (2005). Elimination of CD4+ CD25+ T cell accelerates the development of glomerulonephritis during the preactive phase in autoimmune-prone female NZB $\times$  NZW F1 mice. International journal of experimental pathology,;86(5), 289-296.
- Lowenthal, J. W., Tougne, C., MacDonald, H. R., Smith, K. A., Nabholz, M. (1985). Antigenic stimulation regulates the expression of IL 2 receptors in a cytolytic T lymphocyte clone.;The Journal of Immunology,;134(2), 931-939.
- Huang, B., Zhao, J., Shen, S., Li, H., He, K. L., Shen, G. X., ... Feng, Z. H. (2007). Listeria monocytogenes promotes tumor growth via tumor cell toll-like receptor 2 signaling.;Cancer Research,;67(9), 4346-4352.