## SONY

# **Product Data Sheet**

# Pacific Blue™ anti-rat CD45

**Catalog # / Size:**  $1611125 / 25 \mu g$ 

1611130 / 100 μg

Clone: OX-1

**Isotype:** Mouse IgG1, κ

**Reactivity:** Rat **Concentration:** NULL

### **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is  $\leq 0.25$  microg per million cells in 100 microL volume or 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes:

Additional reported applications (for the relevant formats) include: immunoprecipitation1, immunofluorescence microscopy (acetone fixed, ammonium-thiocyanate separated epidermal sheets)2, immunohistochemistry of acetone3-, isopentane-4, PLP5-, and n-hexane<sup>6</sup> fixed frozen sections and paraffinembedded sections<sup>7,8</sup>, and partial inhibition of NK cell lysis of syngeneic tumor cell lines1.

#### **Description:**

CD45 is a 180-220 kD protein also known as leukocyte common antigen (LCA). It is a protein tyrosine phosphatase with multiple isoforms differing as a result of alternative splicing of the extracellular domain and glycosylation. CD45 is expressed on all hematopoietic cells except erythrocytes and platelets; isoform expression depends on cell type, activation state, and cell maturation. CD45 functions in signal transduction through T and B cell antigen receptors. CD45 has been shown to interact with various proteins including galectin-1, CD2, CD3, and CD4. The OX-1 antibody has been shown to partially inhibit NK cell-mediated lysis of syngeneic tumor cells *in vitro*.