

# Technical Note

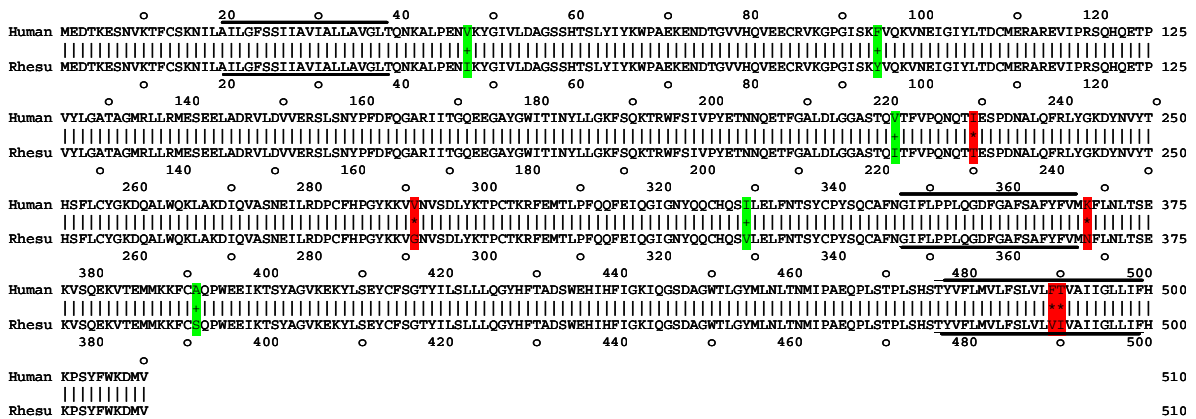
## TN2007-02.1

**Reagent:** Anti-rhesus CD39 antibodies

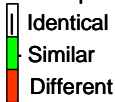
**Description:** CD39 is a membrane-bound ecto-nucleoside triphosphate diphosphohydrolase expressed on endothelium, EBV-transformed or activated human B cells, and a subset of T cells.

**I. Sequence Identity:** The amino acid sequence of human CD39 was compared with the amino acid sequence of rhesus CD39 as deduced from the Baylor College of Medicine Rhesus Genome Project database<sup>1</sup>.

The rhesus macaque amino acid sequence of CD39 has >98% homology with human CD39. This close identity suggests that most anti-human CD39 antibodies will cross-react with macaque CD39.



\*Macaque sequence deduced from Baylor College of Medicine rhesus genetic database

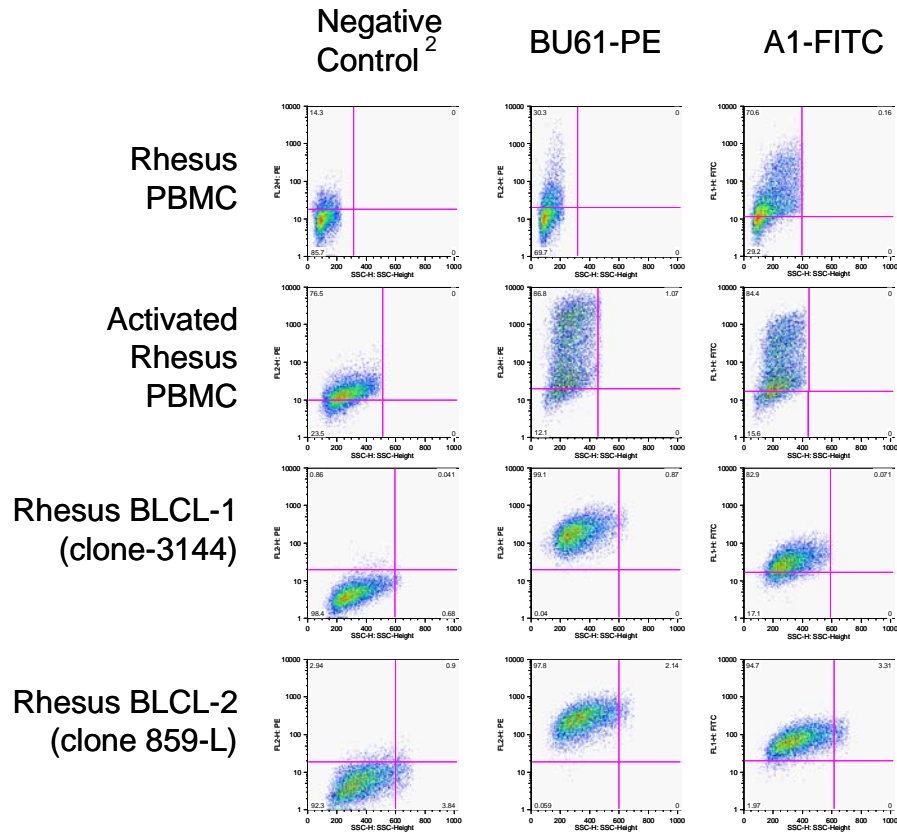


## II. Cross-reactive Antibodies

Two commercially-available monoclonal antibodies against human CD39 were tested for reactivity with fresh rhesus PBMC, rhesus PBMC activated with anti-CD3, and H. papio-transformed rhesus B-lymphoblastoid cell lines.

Clone	Vendors	Fluorochrome tested	Reactivity with rhesus
BU61	Ancell, Santa Cruz Biotechnology	FITC	YES
		PE	YES
A1	Abcam, eBiosciences	PE	YES

**Example:** Staining of rhesus PBMC and B-LCL with anti-CD39 antibodies



<sup>1</sup> <http://www.hgsc.bcm.tmc.edu/projects/rmacaque/>

<sup>2</sup> Only PE-negative controls are shown.



NIH NONHUMAN PRIMATE REAGENT RESOURCE

<http://nhpreagents.bidmc.harvard.edu>

Beth Israel Deaconess Medical Center

Research East 113

330 Brookline Avenue

Boston, MA 02215

617-667-4583