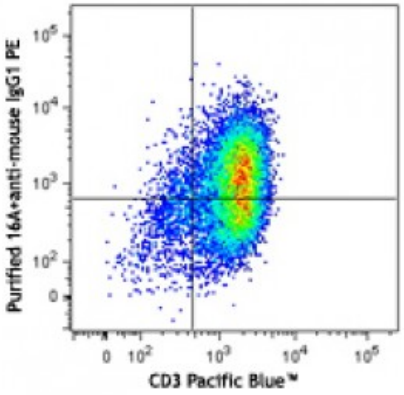
SONY

Product Data Sheet

Purified anti-human CD227 (MUC-1)

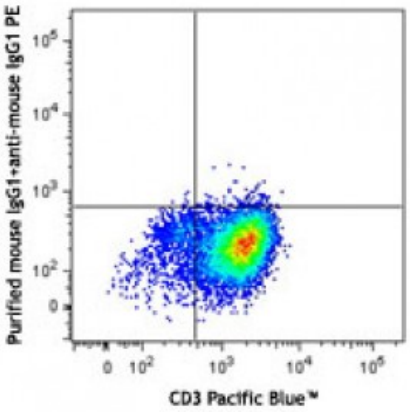
Catalog # / Size:	2378005 / 25 µg 2378010 / 100 µg
Clone:	16A
Isotype:	Mouse IgG1, λ
Immunogen:	Jurkat cells transfected with MUC1
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.5



PHA-activated human peripheral blood lymphocytes (3 days) were stained with purified CD227 (clone 16A, top) or mouse IgG1, κ isotype control (bottom), followed by anti-mouse IgG1 PE and CD3 (clone HIT3a) Pacific Blue™.

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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes:	This clone shows stronger binding to the glycosylated compared to the non-glycosylated peptide1.
Application References:	1. Song W, *et al.* 2012. *Int. J Oncol.* 41:1977. PubMed



Description:	Mucin-1 (MUC-1), cell surface associated or polymorphic epithelia mucin, is a 500-1000 kD proteoglycan expressed by activated T cells, mucosal epithelial cells, and aberrantly expressed on most breast cancers. In normal cells, CD227 is heavily glycosylated, whereas in cancerous cells, the glycosylation is incomplete and premature sialation is also observed. The protein is anchored to the apical surface of the epithelial cell and functions as a lubricant to keep the cell hydrated and to protect against pathogens. It can also function as a signaling molecule by forming a MUC-1/SOS1/GrB2 complex. MUC-1 can interact with cancer antigens such as Her2/neu.
Antigen References:	1. Gendler SJ. 2001. *J. Mammary Gland Biol. Neoplasia.* 6:339. 2. Agrawal B, *et al.* 1998. *Cancer Res.* 58:4079.

3. Rahn JJ, *et al.* 2004. *J. Biol. Chem.* 279:29386.