Anti-Mouse CD274/PD-L1-153Eu

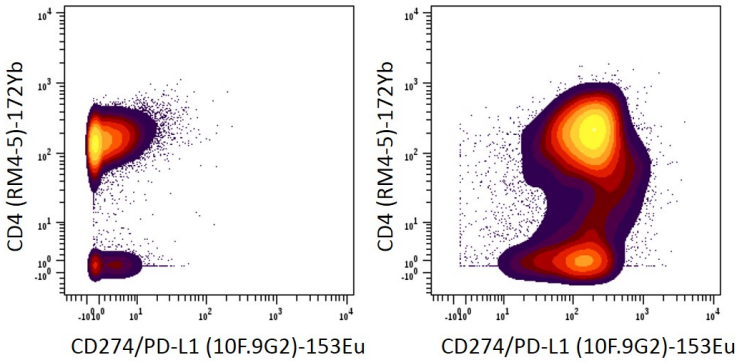
Catalog: 3153016B
Package size: 100 tests
Storage: Store at 4 °C. Do not freeze.

Clone: 10F.9G2
Isotype: Rat IgG2b
Formulation: Antibody stabilizer with 0.05% sodium azide

Technical Information

Validation: Each lot of conjugated antibody is quality control-tested by CyTOF® analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

Recommended usage: The suggested use is 1 µL for up to 3 x 10^6 live cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Mouse splenocytes were incubated for 3 days in media alone (left) or with concanavalin A (right) and then stained with 172Yb-anti-CD4 (RM4-5) and 153Eu-anti-CD274/PD-L1 (10F.9G2). Viable CD3+CD19- cells are displayed in the analysis.

Description

PD-L1 (also known as CD274, B7-H1), one of the ligands for programmed cell death 1 (PD-1), is an immune-inhibitory receptor belonging to the CD28/cytotoxic T lymphocyte antigen 4 (CTLA-4) family. It can deliver an inhibitory signal to PD-1/B7-1-expressing T cells, resulting in immune-suppressive effects. PD-L1 is expressed on activated T cells, B cells, NK cells, DCs, macrophages, and bone marrow-derived mast cells. PD-L1 expression is also found on a wide range of human tumors. In addition, studies have shown that PD-L1 expression strongly correlates with unfavorable prognosis in kidney, ovarian, bladder, breast, liver, gastric, and pancreatic cancer, but not in non-small cell lung cancer (NSCLC). Most importantly, these studies reveal that higher expression of PD-L1 may facilitate advancement of tumor stage and increase invasion potential. PD-L1 expression can be induced by many inflammatory mediators and cytokines, of which interferon-γ (IFN-γ) is the most potent.

References

Bandura, D.R. et al. "Mass cytometry: technique for real time single cell multitarget immunoassay based on inductively coupled plasma time-of-flight mass spectrometry." *Analytical Chemistry* 81 (2009): 6,813–22.

Ornatsky, O.I. et al. "Highly multiparametric analysis by mass cytometry." *Journal of Immunological Methods* 361 (2010): 1–20.