

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SIRP delta in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2588A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Human embryonic kidney cell, HEK293-derived human SIRP delta Phe30-Arg197 Accession # Q9H106
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

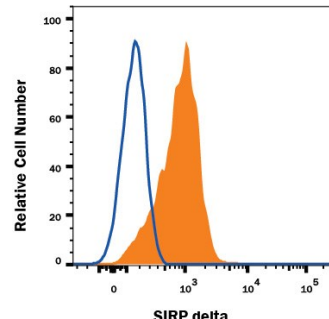
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunocytochemistry	3-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

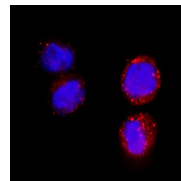
DATA

Flow Cytometry

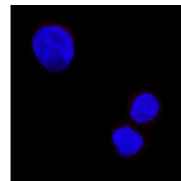


Detection of SIRP delta on HEK293 Human Cell Line transfected with Human SIRP delta by Flow Cytometry. HEK293 cells transfected with Human SIRP delta (filled histogram) or irrelevant protein (open histogram) were stained with Rabbit Anti-Human SIRP delta Monoclonal Antibody (Catalog # MAB10138) followed by APC-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # F0111). View our protocol for [Staining Membrane-associated Proteins](#).

Immunocytochemistry



Positive (THP-1 cells)



Negative (MCF-7 cells)

SIRP delta in THP-1 Human Cell Line. SIRP delta was detected in immersion fixed THP-1 human acute monocytic leukemia cell line (left panel; positive staining) and MCF-7 human breast cancer cell line (right panel; negative staining) using Rabbit Anti-Human SIRP delta Monoclonal Antibody (Catalog # MAB10138) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rabbit IgG Secondary Antibody (red; Catalog # NL004) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

SIRPD (Signal Regulatory Protein Delta), also known as Protein Tyrosine Phosphatase non-Receptor Type Substrate 1-Like 2 (PTPNS1L2), is a member of the signal regulatory proteins (SIRPS) family (1). SIRPD contains a 168 amino acid Ig-like domain that is characteristic of other SIRP family members (1). Unlike other members of the SIRPS family, SIRPD lacks the transmembrane region and is secreted (2). Murine homologs of SIRPD are not characterized. Expression sequence tag analysis suggests that SIRPD may be expressed in sperm cells and respiratory tissue (2). Using BioPlex 2.0 (Biophysical Interactions of ORFeome-derived complexes) high-throughput affinity purification–mass spectrometry (AP–MS) analysis to identify probable protein–protein interactions, several candidate SIRPD interactions were found including DIRAS2 (3). In-house testing indicates SIRPD can interact with DIRAS2.

References:

1. Van den Berg, T.K. *et al.* (2005) *J. Immunol.* **175**:7788.
2. Van Beek, E.M. *et al.* (2005) *J Immunol.* **175**:7781.
3. Huttlin, E.L. *et al.* (2017) *Nature* **545**:505.