

Reagents Provided

Allophycocyanin (APC)-conjugated goat polyclonal anti-mouse

TROP-2: Supplied as 10 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.09% sodium azide.

Antibody type: goat IgG

Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

Storage

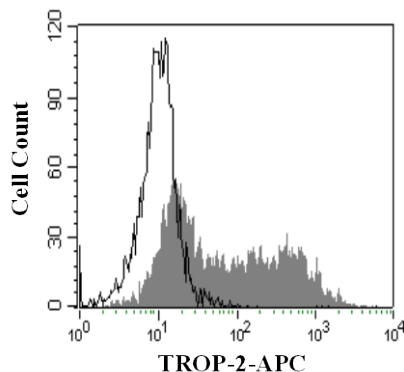
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2-8 °C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing TROP-2 within a population and qualitatively determine the density of TROP-2 on cell surfaces by flow cytometry.

Product Description

TROP-2 was produced in goats immunized with purified, NS0-derived, recombinant mouse cell surface glycoprotein TROP-2 (rmTROP-2) extracellular domain. TROP-2 is alternatively known as tumor-associated calcium signal transducer 2 and lymphocyte antigen 97. Mouse TROP-2 specific IgG was purified by mouse TROP-2 affinity chromatography. The purified antibody was then conjugated to APC fluorochrome. Cell surface expression of TROP-2 is determined by flow cytometry using 620-650 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 660-670 nm.



XB-2 cells were stained with APC-conjugated anti-mouse TROP-2 (Catalog # FAB1122A, filled histogram) or APC-conjugated isotype control (Catalog # IC108A, open histogram).

Background Information

TROP-2, also named tumor-associated calcium signal transducer 2 (TACSTD2), GA733 tumor associated antigen and epithelial glycoprotein-1 (EGP-1), is a type I transmembrane protein highly expressed in carcinomas.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using XB-2 cells.

- Cells may be Fc-blocked with 1 µg of mouse IgG/ 10^5 cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 µL of conjugated antibody was added to up to 1×10^6 cells and incubated for 30 minutes at room temperature.
- Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Mouse Lyse Buffer (Catalog # FC003).
- The cells were resuspended in Flow Cytometry Staining Buffer for analysis by flow cytometry. As a control for this analysis, cells in a separate tube should be treated with APC-labeled goat IgG antibody. This procedure may need to be modified, depending upon cell type and final utilization. Individual users may need to titrate to determine optimal reagent amount for their specific use.

Warning: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.