

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TMEM87A in ELISAs and Western Blots
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 772807
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human TMEM87A Ser22-Asn157 Accession # Q8NBN3
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

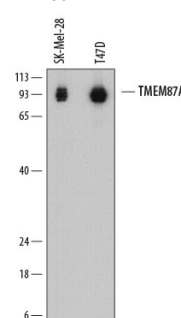
**APPLICATIONS**

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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.2 µg/mL	See Below
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>Simple Western</b>	2 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

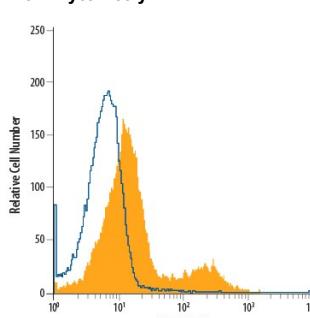
**DATA**

**Western Blot**



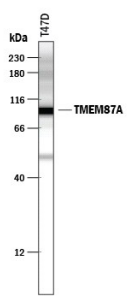
**Detection of Human TMEM87A by Western Blot.** Western blot shows lysates of SK-Mel-28 human malignant melanoma cell line and T47D human breast cancer cell line. PVDF membrane was probed with 0.2 µg/mL of Mouse Anti-Human TMEM87A Monoclonal Antibody (Catalog # MAB7966) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). Specific bands were detected for TMEM87A at approximately 90-95 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Flow Cytometry**




**Detection of TMEM-87A in PC-3 Human Cell Line by Flow Cytometry.** PC-3 human prostate cancer cell line was stained with Mouse Anti-Human TMEM87A Monoclonal Antibody (Catalog # MAB7966, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).

**Simple Western**



**Detection of Human TMEM87A by Simple Western™.** Simple Western lane view shows lysate of T47D human breast cancer cell line, loaded at 0.5 mg/mL. Specific bands were detected for TMEM87A at approximately 98 kDa (as indicated) using 2 µg/mL of Mouse Anti-Human TMEM87A Monoclonal Antibody (Catalog # MAB7966). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

TMEM87A (Transmembrane protein 87A) is predicted to be a 6-transmembrane, 555 amino acid (aa) glyco- and phospho-protein that is expressed on the cell surface. Its expression in the mammary gland is upregulated when there is a loss of caveolin-1 expression, which may confer susceptibility to breast cancer. Within the region used as an immunogen, human TMEM87A shares 83% aa sequence identity with mouse and rat TMEM87A. A potential isoform of 181 aa diverges C-terminal to aa 169, while another of 494 aa is divergent N-terminal to aa 70.