

DESCRIPTION

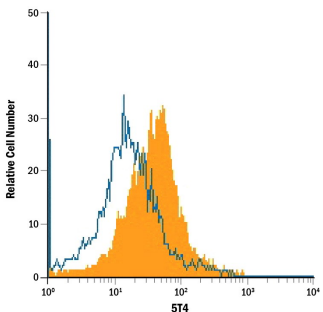
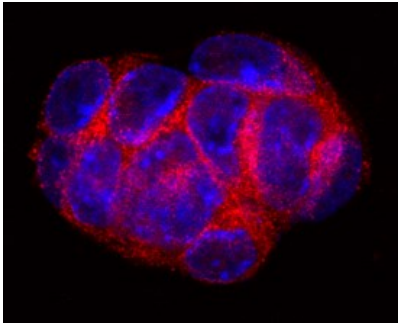
Species Reactivity	Mouse
Specificity	Detects mouse 5T4 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human 5T4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse 5T4 Ser30-Ser361 Accession # AAH58198
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 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
Western Blot	0.1 µg/mL	Recombinant Mouse 5T4
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunocytochemistry	5-15 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

<p>Flow Cytometry</p>  <p>Detection of 5T4 in D3 Mouse Cell Line by Flow Cytometry. Retinoic acid-treated D3 mouse embryonic stem cell line was stained with Sheep Anti-Mouse 5T4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5049, filled histogram) or isotype control antibody (Catalog # 5-001-A, open histogram), followed by Allophycocyanin-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # F0127).</p>	<p>Immunocytochemistry</p>  <p>5T4 in D3 Mouse Cell Line. 5T4 was detected in immersion fixed D3 mouse embryonic stem cell line using Sheep Anti-Mouse 5T4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5049) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI(blue). Specific staining was localized to cytoplasm/membrane. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

5T4 (oncofetal antigen 5T4; also TPBG and trophoblast glycoprotein) is a 72-80 kDa glycoprotein member of the LRR family of proteins. It is expressed on trophoblasts, tumor cells, ovarian cuboidal epithelium and differentiating embryonic stem cells and impacts cell adhesion and motility. The mouse 5T4 cDNA encodes a type I transmembrane protein precursor that is 426 amino acids (aa) in length. It contains a 332 aa extracellular region (aa 30-361) that shows one Ser-rich region followed by seven Leu-rich repeats (aa 90-338). Over aa 30-361, mouse 5T4 shares 95% and 81% aa identity with rat and human 5T4, respectively.