

DESCRIPTION

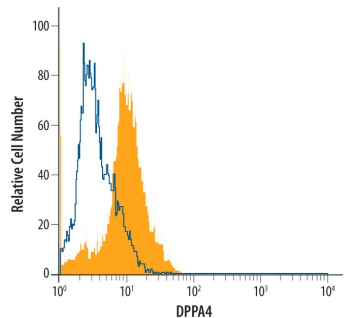
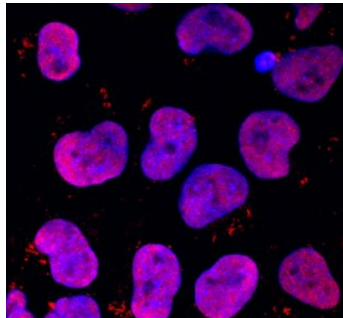
Species Reactivity	Human
Specificity	Detects human DPPA4 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant mouse DPPA4 is observed and less than 1% cross-reactivity with recombinant human DPPA5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human DPPA4 Met1-Glu304 Accession # Q7L190
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
Western Blot	0.1 µg/mL	Recombinant Human DPPA4
Immunocytochemistry	5-15 µg/mL	See Below
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	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>Intracellular Staining by Flow Cytometry</p>  <p>Detection of DPPA4 in NTera-2 Human Cell Line by Flow Cytometry. NTera-2 human testicular embryonic carcinoma cell line was stained with Sheep Anti-Human DPPA4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3674, filled histogram) or isotype control antibody (Catalog # 5-001-A, open histogram), followed by NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # NL010). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p>	<p>Immunocytochemistry</p>  <p>DPPA4 in Human iPSK3 cells. DPPA4 was detected in immersion fixed human plasmid-derived induced pluripotent stem cells (iPSK3) using Sheep Anti-Human DPPA4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3674) 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 nuclei. View our protocol for Fluorescent ICC Staining of Stem 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

DPPA4 is a nuclear SAP-domain protein whose expression is restricted to pluripotent cells, undifferentiated embryonal carcinomas and germ cell tumors. It is considered a marker for embryonic stem cells. Human DPPA4 shares 51% amino acid sequence homology with mouse DPPA4.