



## Biotinylated Anti-human DPPA4 Antibody

### ORDERING INFORMATION

**Catalog Number:** BAF3674

**Lot Number:** YDF01

**Size:** 50 µg

**Formulation:** 0.2 µm filtered solution in PBS with BSA

**Storage:** -20° C

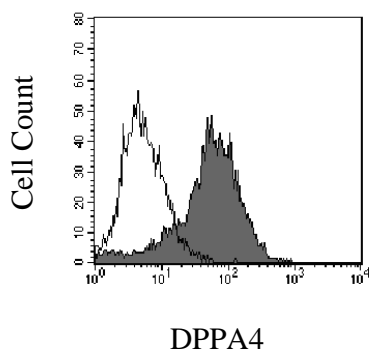
**Reconstitution:** sterile 0.1% BSA in TBS

**Specificity:** human DPPA4

**Immunogen:** *E. coli*-derived rhDPPA4

**Ig Type:** sheep IgG

**Applications:** Western blot  
Flow Cytometry



Human NTERA2 cells were stained with biotinylated anti-DPPA4 (R&D Systems, Cat. # BAF3674, filled histogram), or control antibody (open histogram), followed by PE-conjugated streptavidin (R&D Systems, Cat # F0040).

### Preparation

Produced in sheep immunized with purified, *E. coli*-derived, recombinant human Developmental Pluripotency-Associated Protein 4 (rhDPPA4; aa 1 - 304; Accession # Q7L190). Human DPPA4 specific IgG was purified by human DPPA4 affinity chromatography and then biotinylated. 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.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

### Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody has been selected for use as a detection antibody in the applications listed below.

### Applications

**Western Blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human DPPA4. The detection limit for rhDPPA4 is approximately 5 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows approximately 10% cross-reactivity with mdDPPA4 and less than 1% cross-reactivity with rhDPPA5.

**Flow Cytometry** - This antibody has been tested in NTERA-2 cells. For intracellular staining to detect DPPA4, cells must first be fixed and permeabilized using 4% paraformaldehyde and 0.1% saponin in PBS. Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1-5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled antibodies can be visualized by a secondary developing reagent such as anti-sheep IgG conjugated to a fluorochrome.

**Optimal dilutions should be determined by each laboratory for each application.**