

# Mouse DPPA5/ESG1 Antibody

Monoclonal Rat IgG<sub>1</sub> Clone # 507907 Catalog Number: MAB3984

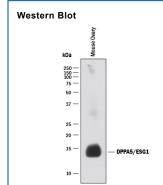
DESCRIPTION			
Species Reactivity	Mouse		
Specificity	Detects mouse DPPA5/ESG1 in direct ELISAs.		
Source	Monoclonal Rat IgG <sub>1</sub> Clone # 507907		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	E. coli-derived recombinant mouse DPPA5/ESG1 Met1-Glu118 Accession # Q9CQS7		
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.

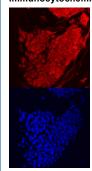
	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below
Immunocytochemistry	8-25 μg/mL	See Below

#### DATA



Detection of Mouse DPPA5/ESG1 by Western Blot. Western blot shows lysates of mouse ovary tissue. PVDF membrane was probed with 1 µg/mL of Rat Anti-Mouse DPPA5/ESG1 Monoclonal Antibody (Catalog # MAB3984) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for DPPA5/ESG1 at approximately 14 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

## Immunocytochemistry



DPPA5/ESG1 in D3 Mouse Stem Cells. DPPA5/ESG1 was detected in immersion fixed D3 mouse embryonic stem cells grown on iMEF using Rat Anti-Mouse DPPA5/ESG1 Monoclonal Antibody (Catalog # MAB3984) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red, upper panel; Catalog # NL013) and counterstained with DAPI (blue, lower panel). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

# PREPARATION AND STORAGE

**Reconstitution** Sterile PBS to a final concentration of 0.5 mg/mL.

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

- 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

Mouse DPPA5 (developmental pluripotency associated 5; also ESG1 and ECAT2) is a 14 kDa RNA binding protein found in embryonic stem and primordial germ cells. It is 118 amino acids (aa) in length and contains one type 1 K-homology RNA-binding domain (aa 25-87). It does, however, associate with mRNA for select genes (Cdc25a; Cdc42) and serves as a marker for pluripotent cell types. There are seven DPPA5 pseudogenes and multiple potential alternate splice forms for the true gene. If the alternate splice forms are translated, they will produce at least four variants that show major aa substitutions after Lys99. Mouse DPPA5 is 81% and 63% aa identical to rat and human DPPA5, respectively.

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