

# Mouse Shrew-1/AJAP1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF7970

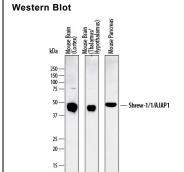
DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse Shrew-1/AJAP1 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human AJAP1 is observed.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Shrew-1/AJAP1 His157-His283 Accession # A2ALI5	
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	1 μg/mL	See Below

# DAIA



Detection of Mouse Shrew-1/AJAP1 by Western Blot. Western blot shows lysates of mouse brain (cortex) tissue, mouse brain (thalamus/hypothalamus) tissue, and mouse pancreas tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse Shrew-1/AJAP1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7970) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Shrew-1/ AJAP1 at approximately 45-50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### PREPARATION AND STORAGE

Decemblishing	Ctarile DDC to a final composituation of 0.0 man/mal
Reconstitution	Sterile PBS to a final concentration of 0.2 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

#### Stability & Storage

## Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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

AJAP-1 (Adherens Junction Associated Protein 1; also Shrew-1 and Gm573) is a 44-47 kDa transmembrane protein found on the basolateral surface of epithelium. It is presumably expressed by multiple types of epithelium, and participates in cell-cell adhesion. Zonula adherens are structures that participate in the generation of cell contact adherens junctions. Such junctions, or complexes, are key to the maintenance of epithelial cell polarity and the maintenance of cell-to-cell contact. Central to this complex is E-cadherin, a transmembrane molecule that makes crucial contacts with cytoskeletal actin via catenins. AJAP-1 is an accompaning transmembrane molecule that interacts with E-cadherin and appears to promote the internalization of E-cadherin upon growth factor stimulation. This facilitates the dissolution of adherens junctions with an increase in cell motility. Notably, AJAP-1 is also known to complex with CD147 in nonpolar, invasive cells, suggesting that AJAP-1 may play a more complex role in cell migration. Mouse AJAP-1 is a 412 amino acid (aa) type III (no signal sequence) transmembrane protein. It contains a 284 aa extracellular region (aa 1-284) plus a 106 aa cytoplasmic domain (aa 306-412). Over aa 1-283, mouse AJAP-1 shares 95% and 75% as sequence identity with rat and human AJAP-1, respectively; over aa 158-283, mouse AJAP-1 sequence identity changes little, showing 95% and 78% equality with rat and human AJAP-1, respectively.

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