



## *Biotinylated Anti-mouse SDNSF/MCFD2 Antibody*

### ORDERING INFORMATION

**Catalog Number:** BAF2556

**Lot Number:** VAK01

**Size:** 50 µg

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

**Storage:** -20° C

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

**Specificity:** mouse and human SDNSF

**Immunogen:** NS0-derived rmSDNSF

**Ig Type:** goat IgG

**Applications:** Western blot  
Immunohistochemistry

### *Preparation*

Produced in goats immunized with purified, NS0-derived, recombinant mouse Stem Cell Derived Neural Stem/Progenitor Cell Supporting Factor (rmSDNSF). SDNSF specific IgG was purified by mouse SDNSF affinity chromatography and then biotinylated. SDNSF, also known as MCFD2 (multiple coagulation factor deficiency 2), was described as a secreted molecule from adult hippocampal neural stem/progenitor cells (ANSC) that functions as an autocrine/paracrine factor to maintain neurogenesis in the central nervous system. It is also a component of the MCFD2-LMAN1 (Mannose-binding lectin-1, also known as ERGIC-53) complex that functions as a specific cargo receptor for the ER to golgi transport of proteins. Mutations in MCFD2 causes factor 5 and factor 8 combined deficiency. Human SDNSF shares 84% and 82% amino acid sequence identity with rat and mouse SDNSF, respectively.

### *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 mouse and human SDNSF. The detection limit for rmSDNSF and rhSDNSF is approximately 10 ng/lane under non-reducing and reducing conditions.

**Immunohistochemistry** - This antibody has been used at a concentration of 10 µg/mL to detect SDNSF in mouse fetal brain tissue sections. Sections were fixed with PBS containing 4% paraformaldehyde for 20 minutes at room temperature and blocked with PBS containing 10% normal donkey serum, 0.1% Triton X-100, and 1% BSA for 45 minutes at room temperature. After blocking, cells were incubated with diluted primary antibody overnight at 4° C followed by Rhodamine Red-coupled streptavidin at room temperature in the dark for one hour. Between each step, cells were washed with PBS containing 0.1% BSA.

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