



Anti-mouse Serpine D1/Heparin Cofactor II Antibody

ORDERING INFORMATION

Catalog Number: AF1265

Lot Number: IWZ01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: mouse Serpin D1

Immunogen: NS0-derived rmSerpine D1 (aa 24 - 478)

Ig Type: mouse Serpin D1 specific goat IgG

Applications: Neutralization
Direct ELISA
Western blot
Immunoprecipitation

Preparation

Produced in goats immunized with purified, NS0-derived, recombinant mouse Serpin D1 (rmSerpine D1; aa 24 - 478). Mouse Serpin D1 specific IgG was purified by mouse Serpin D1 affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 0.1 mg/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 its ability to neutralize the bioactivity of mouse Serpin D1. In direct ELISAs and western blots, this antibody shows less than 1% cross-reactivity with rhSerpine A1, rhSerpine A3, rhSerpine A5, rmSerpine C1 and rmSerpine F2.

Applications

Neutralization - This antibody has been used to neutralize the inhibitory activity of rmSerpine D1 (R&D Systems, Catalog # 1265-PI) against rhThrombin (R&D Systems, Catalog # 1463-SE). The antibody was preincubated with the inhibitor at different molar ratios at room temperature for 30 min. The resulting mixtures were then incubated with the enzyme at room temperature for 15 min. The enzyme was assayed with a peptide substrate, Bov-V-P-R-AMC. 50% of the proteolytic activity was restored by the antibody at 1.23 µg/mL (IC_{50}) under conditions in which 0.475 µg/mL of the inhibitor, 0.05 µg/mL of the enzyme, and 100 µM of the substrate were present. Considering the molecular masses of the inhibitor (56.3 kDa) and the antibody (150 kDa), IC_{50} was achieved at approximately 1:1 molar ratio of the antibody to the inhibitor.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse Serpin D1. The detection limit for rmSerpine D1 is approximately 0.01 ng/well.

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect mouse Serpin D1. The detection limit for rmSerpine D1 is approximately 5 ng/lane under non-reducing and reducing conditions.

Immunoprecipitation - This antibody has been used to immunoprecipitate rmSerpine D1 from conditioned media of transfected NS0 cells.

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