

ORDERING INFORMATION

Catalog Number: AF1989

Lot Number: KSG01

Size: 100 μg

Formulation: 0.2 um filtered solution in PBS

with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: mouse Marapsin

Immunogen: NS0-derived rmMarapsin

(aa 23 - 290)

Ig Type: goat IgG

Applications: Direct ELISA

Western blot Immunoprecipitation Neutralization

Anti-mouse Marapsin/Pancreasin Antibody

Preparation

Produced in goats immunized with purified, NS0-derived, recombinant mouse Marapsin (rmMarapsin; aa 23 - 290). Mouse Marapsin specific IgG was purified by mouse Marapsin affinity chromatography.

Formulation

Lyophilized from a 0.2 μ m 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 enzymatic activity of rmMarapsin.

Applications

Neutralization - This antibody has been used to neutralize the enzymatic activity of rmMarapsin (R&D Systems, Catalog # 1989-SE). The antibody was preincubated with the enzyme at different molar ratios at room temperature for 30 minutes. The enzyme was then assayed with a peptide substrate, Z-G-R-SBzl. 50% of the proteolytic activity was inhibited by the antibody at approximately 5 μg/mL (IC $_{50}$) under conditions in which the enzyme was present at 0.5 μg/mL and the substrate concentration was 100 μM. Considering the molecular masses of the enzyme (30 kDa) and the antibody (150 kDa), IC $_{50}$ was achieved at approximately 3:1 molar ratio of the antibody to the enzyme.

Immunoprecipitation - This antibody has been used to immunoprecipitate rmMarapsin from conditioned media of transfected NS0 cells. The recovered rmMarapsin can be detected by western blot analysis using a monoclonal antibody (R&D Systems, Clone # 246407).

Direct ELISA - This antibody can be used at 0.5 - 1.0 μ g/mL with the appropriate secondary reagents to detect mouse Marapsin. The detection limit for rmMarapsin is approximately 0.6 ng/well. In this format, this antibody shows approximately 15% cross-reactivity with rhMarapsin.

Western blot - This antibody can be used at 0.1 - 0.2 μ g/mL with the appropriate secondary reagents to detect mouse Marapsin. The detection limit for rmMarapsin is approximately 2 ng/lane under non-reducing and reducing conditions.

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