



Anti-human GASP-1/WFKKNRP Antibody

ORDERING INFORMATION

Catalog Number: AF2070

Lot Number: UQC01

Size: 100 µg

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

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human GASP-1

Immunogen: NS0-derived rhGASP-1

Ig Type: goat IgG

Applications: Direct ELISA
Western blot
Immunoprecipitation
Neutralization

Preparation

Produced in goats immunized with purified, NS0-derived, recombinant human Growth and differentiation factor-Associated Serum Protein-1 (rhGASP-1; aa 35 - 576). Human GASP-1 specific IgG was purified by human GASP-1 affinity chromatography.

Formulation

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

Endotoxin Level

< 0.1 EU per 1 µg of the antibody as determined by the LAL method.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 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 recognize human GASP-1 in direct ELISAs and western blots. In these formats, this antibody shows less than 5% cross-reactivity with rhGASP-2.

Applications

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human GASP-1. The detection limit for rhGASP-1 is approximately 0.2 ng/well.

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human GASP-1. The detection limit for rhGASP-1 is approximately 1 ng/lane under non-reducing and reducing conditions.

Immunoprecipitation - This antibody has been used to immunoprecipitate rhGASP-1 from conditioned media of transfected NS0 cells.

Neutralization - This antibody has been used to neutralize the inhibitory activity of rhGASP-1 (R&D Systems, Catalog # 2070-GS) against trypsin. The antibody was preincubated with the inhibitor at different molar ratios at room temperature for 30 minutes. The resulting mixtures were then incubated with the enzyme at room temperature for 15 minutes. The enzyme was assayed with a fluorogenic peptide substrate (R&D Systems, Catalog # ES002). 50% of the proteolytic activity was restored by the antibody at 18.9 µg/mL (IC_{50}) under conditions in which 1.5 µg/mL of the inhibitor, 0.05 µg/mL of the enzyme, and 5 µM of the substrate were present. Considering the molecular masses of the inhibitor (60.7 kDa) and the antibody (150 kDa), IC_{50} was achieved at approximately 5:1 molar ratio of the antibody to the inhibitor.

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