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ProductInformation

ANTI-RAT IgG (WHOLE MOLECULE)
GOLD CONJUGATE, 5 nm
Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody
Adsorbed with Human Serum Proteins

Product Number **G 5410**

Product Description

Anti-Rat IgG is developed in goat using rat IgG purified from normal rat serum as the immunogen. The antibody is isolated by immunospecific methods of purification to remove essentially all goat serum proteins, including immunoglobulins which do not specifically bind to rat IgG. The antibody preparation is solid phase adsorbed with human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. The adsorbed affinity isolated specific antibody is then conjugated to 5 nm gold particles and excess antibody is removed.

Specificity for rat IgG is determined by Dot Blot Assay (DBA) using purified rat IgG and normal human serum. No reactivity with human serum proteins is observed.

Reagents

The conjugate is provided as colloidal suspension in 0.02 M Tris buffered saline, pH 8.0, with 1% BSA and 20% glycerol as stabilizers, containing 0.05% sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C.

Product Profile

Information on particle size and distribution (by transmission electron microscopy; n=100), particle concentration, spectrophotometric data (1 cm lightpath, deionized H_2O as blank) and clustering data may be found on certificate of analysis.The conjugate should be diluted for most applications, using 0.5 M NaCl, buffered at pH 6 to 8, containing 0.1% BSA, 0.05% Tween 20 and 5% fetal bovine serum to minimize background staining. For any given application, the optimum concentration of the conjugate must be determined experimentally. For most applications the final A_{520} may range from 1.0 to 0.05 (1:5-1:100 dilution) with incubation times in the range of 30 minutes to 12 hours.[3]

Binding activity is determined using a modification of the dot blot assay of Brada and Roth.[1] In this assay a 1 mg/ml solution of rat IgG is serially diluted in phosphate buffered saline, 1 µl of each dilution is then applied to nitrocellulose paper. Binding activity is defined as the minimum amount of rat IgG detectable as a visible pink-red spot after a 1 hour incubation with the gold conjugate diluted to an A_{520} of 0.25.

References

1. Brada, D. and Roth, J., Anal. Biochem., **142**, 79 (1984).
2. Ackerman, G., et al., J. Histochem., Cytochem., **31**, 433 (1983).
3. Hsu, Y-H., Anal Biochem., **142**, 221 (1984).

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