Product Information

α-Casein–Agarose

Saline Suspension

C3905
Storage temperature 2-8 °C

Application

a-Casein is a protein that can be conjugated to agarose for use in affinity chromatography[1-3] and protein chromatography.[4] Casein-agarose may be used for the purification of protein kinases[5-10] and DNA-dependent RNA polymerases.[5] This product has been specifically used in various protein binding assays.[11-12]

Reagent

Suspension in 0.5 M NaCl containing preservative.

Preparation Instructions

Matrix: 4% beaded agarose activated using cyanogen bromide

Attachment: Amino group of casein

Spacer: 1 atom

Storage/Stability

Do not freeze. Freezing will damage the agarose bead structure.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Procedures

The resin should be washed well with several aliquots of buffer (50 mL per 1 mL gel) to remove all NaCl and preservative, and any free ligand which may have leached from agarose during storage. The resin is stable in the range pH 5.0 to pH 9.0.

One suggested equilibration buffer is as follows: 10 mM Tris-HCl (pH 7.5), 10 mM $MgCl_2$, 22 mM NH_4Cl, 10 mM β-mercaptoethanol, and 5% glyercol.[6]

Elution of protein may be affected by adding NaCl from 100 mM up to 600 mM to this buffer.[3] Removing tightly bound material (because of nonspecific binding) may require using at least 10 column volumes of 1 M NaCl for each column volume of resin. If material still remains, a 2 M urea solution (at least 10 column volumes) may be successful.

References

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