Imgen BioSciences, Inc.

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B-1003: Gentamicin-Agarose 4B

Product Name: Gentamicin-Agarose 4B

Catalogue No: B-1003

Antigen/Ligand: Gentamicin

Antigen/Ligand Concentration: Not determined

Bead Structure: 4% agarose

Bead Size Range: 45-165 μm

Mean Bead Size: 90 μm

Linker: 6-aminohexanoic acid

Linker Space: 8 atoms

Size: 1 g

Form: Lyophilized powder (stabilized with lactose and dextran)

Swelling: 1 g swells to 3-4 ml

Binding Capacity: Antibodies: 15-20 mg/ml of drained gel; BPBs: not determined

Max Linear Flow Rate*:   75 cm/h at 25°C, HR 16/10 column, 5 cm bed height

Storage Temp: Keep at 2-8°C.

Applications: Used as capture ligand/antigen for the separation or purification of gentamycin binding proteins and/or antibodies specific to gentamycin by affinity chromatography and/or pull down assay.

Brief description:

Gentamycin sulfate salt is covalently conjugated to 4% beaded agarose. The one or more of 4 amino groups in the gentamycin are directly linked to the active group of N-hydroxysuccinimide on the pre-activated CH-agarose. This product is produced specifically for the binding of gentamycin binding agents such as HSP73 (ref: Miyazaki T et al. 73-kDa molecular chaperone HSP73 is a direct target of antibiotic gentamycin. JBC. 279: 17295-17300, 2004).

There is approximately 15 µmole of active hydroxycuccinidie group/ml of drained agarose 4B gel. For coupling the ligand/antigen, 1 volume of coupling buffer containing 100 mM gentamicin sulfate is added to a same volume of swollen agarose 4B gel. Assuming 30% of active hydroxycuccinidie group is crosslinked with gentamicin which has 4 amino groups per molecule, the final concentration of gentamicin is 1.1 to 4.5 µmole/ml of drained agarose gel.

PLEASE note that this product is intended for research use only; not for diagnostic or clinical use.

*Linear flow rate (cm/hr) = volumetric flow rate (cm^3/min) X 60min/Cross sectional area of column (cm^2)

(Updated September, 2011)