



Imgen BioSciences, Inc.

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B-1002: Penicillin G-Agarose 4B

Product Name:	Penicillin G-Agarose 4B
Catalogue No:	B-1002
Antigen/Ligand:	Penicillin G
Antigen/Ligand Concentration:	Not determined
Bead Structure:	4% agarose
Bead Size Range:	45-165 μm
Mean Bead Size:	90 μm
Linker:	DADPA
Linker Space:	9 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; BPs: 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 antigen/ligand for the separation or purification of penicillin binding proteins (PBPs) and/or antibodies specific to penicillin G by affinity chromatography and/or pull down assay.

Brief description:

Penicillin G is covalently conjugated to 4% beaded agarose. The carboxyl group in the penicillin G is directly linked to the active group of primary amine at the end of diaminodipropylamine (DADPA) on the DADPA activated agarose. This product is produced specifically for the binding of penicillin binding agents such as penicillin binding proteins (PBPs) and penicillin G-specific antibodies.

There is approximately 16-20 μ mole of amine/ml of drained DADPA activated agarose 4B gel. For coupling the ligand/antigen, 1 volume of coupling buffer containing 15 mM penicillin G is added to a same volume of swollen agarose 4B gel. Assuming 10% of amino group is crosslinked with penicillin G which has only 1 carboxyl group per molecule, the final concentration of ampicillin is 1.6-2 μ mole/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)