



Imgen BioSciences, Inc.

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B-1004: Tetracycline-Agarose 6B

Product Name:	Tetracycline-Agarose 6B
Catalogue No:	B-1004
Antigen/Ligand:	Tetracycline
Antigen/Ligand Concentration:	Not determined
Bead Structure:	6% agarose
Bead Size Range:	45-165 μ m
Mean Bead Size:	90 μ m
Linker:	1,4-bis(2,3-epoxypropoxy-)butane
Linker Space:	12 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; TetR: 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 tetracycline binding proteins (e.g., TetR) and/or antibodies specific to tetracycline by affinity chromatography and/or pull down assay.

Brief description:

Tetracycline is covalently conjugated to 6% beaded agarose. One or more of amino and hydroxyl groups in the tetracycline are directly linked to the active epoxy groups of on the epoxy-activated agarose 6B. There is 19 to 40 μmole epoxy group/ml of drained agarose 6B gel.

For coupling the ligand/antigen, 10 volume of coupling solution containing 2 mM tetracycline are added per gram dry weight of epoxy-activated agarose 6B (there is approximately 3.5 ml swollen agarose 6B gel in the solution.) (ref: Berens C et al. A tetracycline-binding RNA aptamer. *Bioorg Med Chem.* 9: 2549-2556, 2001). Assuming 33% of coupling efficiency, the final antibiotic concentration is 0.67 $\mu\text{mole/ml}$ 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)