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PureCube Phenyl Agarose

Product	Catalog No.	Package size
PureCube Phenyl Agarose (50 mL)	**39105**	**100 mL 50% suspension**
PureCube Phenyl Agarose (250 mL)	**39110**	**500 mL 50% suspension**
PureCube Phenyl Agarose (500 mL)	**39112**	**1000 mL 50% suspension**
PureCube HIC Starter Set (10 ml Butyl, Phenyl, Octyl Agarose each)	**39099**	**3 x 20 mL 50% suspension**

Product Description

PureCube Phenyl Agarose has been synthesized for the protein purification using hydrophobic interaction chromatography. Binding of proteins to HIC columns is usually achieved at high salt concentration, and elution with a decreasing salt gradient. When establishing a purification procedure for a novel protein, it is recommended to test different hydrophobic matrices for their binding capacity and resolution.

This affinity chromatography matrix is based on BioWorks Workbeads, consisting of 7.5% cross-linked agarose. The material is highly porous to allow for optimal protein interaction. Cross-linked agarose is also physically very stable, making it suitable for purification processes under low pressure with flow rates up to 6 mL/min (optimal 0.5 – 2 mL/min). Our agarose is very homogeneous in size with a medium particle diameter of 40 µm, yielding a high degree of reproducibility between individual purification runs.

A phenyl group is covalently coupled to PureCube Agarose. The phenyl group density is higher than 40 µmol/ml, and provides a binding capacity for BSA of 25 mg/ml, and for lysozyme of 45 mg/ml. PureCube Phenyl Agarose is delivered as a 50% suspension. Therefore, 1 mL suspension will yield 500 µL bed volume. The suspension contains 20% ethanol to prevent microbial growth.

Cleaning-in-place (CIP)

PureCube Phenyl Agarose is stable at a pH range of 2-13, making it easy to develop cleaning-in-place (CIP) procedures, which should be performed at least every 5 purification runs. For CIP, the column can be washed with 5-10 column volumes of up to 70% ethanol or 30% isopropanol, or 0.5-1.0 M NaOH. Cleaning-in-place can also be performed with detergents. Make sure to use gradient-based methods when using detergents to avoid the formation of air bubbles. In any case, ensure to remove the cleaning agents by washing with 5-10 column volumes of double distilled water.

Sterilization

To sterilize PureCube Butyl Agarose, the matrix can be autoclaved for 20 minutes at 120 °C. Note that the matrix has to be removed from the column before autoclaving.

Shipping & Storage

Shipment Temperature	Ambient temperature
Short-term Storage	In neutral buffer at 4 °C
Long-term Storage	20 mM sodium acetate, 20% ethanol, pH 6.5 at 4 °C

Additional Information

For protein purification protocols, please visit our webpage at: www.cube-biotech.com/protocols. For hydrophobic interaction chromatography, and for affinity purification of His-tagged, GST-tagged, rho-tagged or strep®-tagged proteins, Cube Biotech offers dedicated agarose resins, magnetic beads and prepacked cartridges. Also available are a range of ultrapure detergents and buffers for extraction and purification of proteins. See www.cube-biotech.com/products for details.