

### Ovalbumin Protein-Agarose

**Cat.** OVA15-AS

Ovalbumin-Agarose (Aff matrix)

**SIZE:** 1 ml

**FORM:** Soln

Lyophilized

Expression of genes in E. coli or yeast or baculovirus offers a convenient system to produce large amounts of recombinant proteins that may otherwise be difficult to isolate from natural cells and tissues. Very often antibodies to these newly identified proteins are not available to study its biochemical properties, monitor protein expression, and purification. In order to circumvent this problem, short pieces of well-defined peptides (Poly-His, Flag-epitope or c-myc epitope or HA-tag) or small proteins (bacterial GST, MBP, Thioredoxin, b-Galactosidase, VSV-Glycoprotein etc) are often cloned along with the target gene. Proteins are expressed as fusion proteins. Antibodies to these fusion-tags are already available to monitor fusion protein expression and purification. Therefore, fusion-tags serve as universal tags much like secondary antibodies. Many tags have their own characteristics. Poly-His-fusion proteins (6 x His) can bind to Nickel-Sepharose or Nickel-HRP. GST-fusion proteins can bind to glutathione-Sepharose. Therefore, a high degree of purification of fusion protein can be achieved in just one affinity purification step. Purity of fusion proteins can be followed by Tag-antibodies. Very often, fusion proteins are directly injected into animals to generate antibodies. Some fusion tags can be removed later by treatment with enzymes to generate tag-free recombinant proteins.

#### Source of Antigen and Antibodies

Purified chicken egg ovalbumin was coupled to agarose at ~5 mg/ml of beads (**Cat # OVA15-AS**) using CNBR-activated agarose beads. The affinity matrix is supplied in PBS pH 7.4 containing 0.05% azide. The column has a binding capacity of approx. 5-10 mg anti-Ovalbumin per ml of beads. Typically, this may corresponds to 5-10 ml antiserum containing antibodies to Ovalbumin. The anti-Ovalbumin IgG may vary and therefore, binding capacity of the Ovalbumin-agarose must be evaluated for each batch of antiserum,

Store at 4oC. DO NOT FREEZE.

#### Suggested uses

Many antibodies are made to small peptides or haptens that are injected as Ovalbumin-conjugates. Antibodies are produced against the carrier protein (Ovalbumin) and the coupled peptide or hapten. Anti-Ovalbumin antibodies may interfere with some analyses. The Ovalbumin-agarose column (Cat # OVA15-AS) can be used to remove the anti-Ovalbumin antibodies using standard antibody purification techniques.

We recommend processing approx. 1-5 ml antiserum per 1 ml of the beads or it can be scaled up accordingly. Load antiserum diluted 1:5 in PBS to adsorb anti-Ovalbumin at room temp. Collect unbound fraction containing Ovalbumin-depleted

antiserum. It may be necessary to repeat this adsorption if the sample contain high concentrations of anti-Ovalbumin.

The column can be regenerated by passing 3 mls of 0.1M Glycine buffer, pH 2.5, and then immediately washing with PBS pH 7.4 with 10-20 volumes. Store column in PBS containing 0.05% azide at 4oC. DO NOT FREEZE the beads at any stage.

This product is for in vitro research use only.

#### Related material available from ADI

Purified GST, Monoclonal anti-GST, GST Coated ELISA plates; Anti-Goat HRP conjugates'

**Western blot Recycling Kit;** Strips antibodies in 5-10 min at room temp.

OVA15-AS      40601A