

Peptide M / Agarose

IgA1 and IgA2 binding peptide

Catalog code: gel-pdm-2, gel-pdm-5

<https://www.invivogen.com/peptide-m-agarose>

For research use only

Version 19B11-MM

PRODUCT INFORMATION

Contents

Peptide M / Agarose is available in two quantities:

- 2 ml Peptide M / Agarose provided as a 50% v/v gel slurry in PBS 20% v/v ethanol (total volume 4 ml): gel-pdm-2
- 5 ml Peptide M / Agarose provided as a 50% v/v gel slurry in PBS 20% v/v ethanol (total volume 10 ml): gel-pdm-5

Storage and stability:

- Peptide M / Agarose is shipped at room temperature. Store at 4°C. **DO NOT FREEZE.**
- Peptide M / Agarose is stable at least 12 months when properly stored when properly stored in regeneration and storage buffer (20% (v/v) ethanol in phosphate buffered saline). **DO NOT FREEZE.**

Note: Peptide M / Agarose can be reused at least 10 times.

DESCRIPTION

Peptide M is a 50 aa synthetic peptide derived from a streptococcal M protein containing an additional C-terminal cysteine residue. Peptide M binds monomeric and dimeric human IgA of both subclasses (IgA1 and IgA2) with high specificity and affinity. It also binds bovine IgA but not murine IgA. Peptide M binding occurs at a site in IgA-Fc conserved in human IgA1 and IgA2 and bovine IgA but not in mouse IgA. Peptide M can be used for single-step affinity purification of IgA and for specific detection of antigen-bound IgA1.

Peptide M / Agarose from InvivoGen uses the recombinant form of protein M coupled to beads using a leak-resistant chemistry that provides a support with minimal nonspecific binding. Its binding capacity is 4-6 mg human IgA per ml of gel.

Antibody	Peptide M binding
Human κ light chain	-
Human λ light chain	-
Human IgA1	++++
Human IgA2	++++
Human IgG	-
Human IgM	-
Mouse IgA	-
Cow IgA	+

METHOD

Purification of immunoglobulins using immobilized Peptide M / Agarose

Buffers:

Equilibration and wash buffer: 10 mM sodium phosphate, 150 mM sodium chloride, pH 7.2

Elution buffer: 0.1 M glycine, pH 2-3

Neutralization buffer: 0.75 M sodium phosphate or 1 M TRIS, pH 7.5-9

Regeneration and storage buffer: 20% (v/v) ethanol in phosphate buffered saline

Immunoglobulin purification procedure

1. Pack 1 ml of immobilized Peptide M / Agarose into a suitable column.
2. Perform all chromatography steps at a flow rate of 0.5-1 ml/min, or under gravity flow.
3. Equilibrate the column with 5 ml of equilibration and wash buffer.

Optional:

In the presence of certain denaturing agents such as urea or guanidine chloride, we recommend to dialyze sample against 100 volumes of equilibration and wash buffer.

4. Filter the dialyzed sample using a 0.2 μm filter.
5. Load the sample onto the column.
6. Wash the column with 10 ml of equilibration and wash buffer.
7. Elute the column with 10 ml of elution buffer.
8. Immediately adjust the eluate to pH 7.5 by adding neutralization buffer.
9. Wash the column with 10 ml of equilibration and wash buffer.
10. Store Peptide M / Agarose in regeneration and storage buffer at 4°C.

Note: The procedure outlined above can be scaled up or down as desired.

RELATED PRODUCTS

Product	Description	Cat. code
Protein G / Agarose	For IgG purification	gel-agg-2
Protein L / Agarose	For IgA and IgG purification	gel-protl-2

TECHNICAL SUPPORT

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