

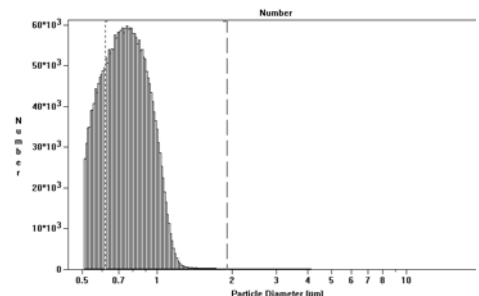


## M-PVA Ak1x *for research only*

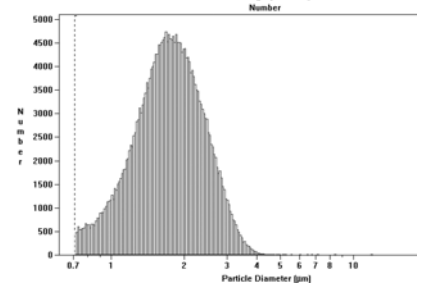
NHS activated M-PVA Magnetic Beads

**Standard Bead Sizes<sup>1</sup>:**  
*indicated by the last number (1 or 2)  
in the product name*

**M-PVA Ak11:** 0.5 – 1.0 µm



**M-PVA Ak12:** 1.0 – 3.0 µm



**Standard Package Size<sup>2</sup>:** 2 x 1 ml bead suspension

**Concentration:** 25 mg/ml

**Standard Magnetite Content:** 50 - 60 %

**Storage:** in isopropanol

**Stability:** at least 1 month at 4 °C.

**Activation degree:** **M-PVA Ak11:** 390 µmol NHS/g

**M-PVA Ak12:** 350 µmol NHS/g

**Binding Capacity:** **M-PVA Ak11:** 8 - 20 mg protein/g

**M-PVA Ak12:** 5 - 15 mg protein/g

<sup>1</sup> other beads sizes on request

<sup>2</sup> other package sizes or bulk ware on request



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*Further Questions?*

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**Properties:**

These superparamagnetic beads consist of a matrix of carboxylated polyvinyl alcohol, which is subsequently activated with N-hydroxy-succinimidyl (NHS) ester functionalities and can therefore be used for the direct coupling of proteins, nucleic acids or other ligands with amino functionalities.

**Standard Coupling Protocol**

1. Shake bead suspension vigorously and transfer calculated volume to a reaction flask.
2. Magnetically separate until the supernatant is clear and wash twice with double volume of cold buffer (e.g. 0,05 M MES, pH 5-6). The wash buffer should have a pH below 7 to avoid hydrolysis of NHS-ester functionalities.
3. Wash rapidly with cold coupling buffer (e.g. MES, MOPS, HEPES; 0,02-0,1 M; pH 6,5-8).
4. Dissolve calculated amount of protein in coupling buffer and add protein solution to the prewashed beads.
5. Shake vigorously and rotate at least 2 hours at room temperature or 12 hours at 4 °C.
6. Wash twice with double volume of coupling buffer.
7. Add double volume of quenching solution (e.g. 0,05 M Tris with 0,1 % ethanolamine or glycine; pH 7,5-8,5) and rotate at least one hour at room temperature.
8. Wash three times in storage buffer (e.g. PBS or Tris with 0,1 % BSA), resuspend in storage buffer and store at 4 °C.

**!** *Do not dry bead suspensions to avoid decreasing binding capacity.*

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