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TECHNICAL DATA SHEET 911

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Accessory Reagents

Catalog Numbers: BLI5288, BLI1909

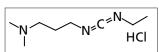
DESCRIPTION

Microspheres are routinely coated with ligands such as antibodies, oligonucleotides, peptides, etc. for use in diagnostics and bioseparations. While affinity and adsorbed coatings are useful, covalent coupling results in the permanent attachment of the biomolecule to the functionalized (e.g. carboxyl or amine) microsphere. It can provide needed stability when developing a commerical reagent, and for multiplexed assays, where analyte-specific bead populations are mixed.

Carboxyl- and amine-modified microspheres require the use of a chemical linker for activation and covalent immobilization of ligand. EDAC and glutaraldehyde are two of the most common crosslinkers used in bead coating protocols.

DEPC-CARBODIIMIDE (EDAC)

EDAC is a zero-length crosslinker that is routinely used for the covalent binding of amine-containing ligands to carboxylated microspheres. For use, warm the bottle to room

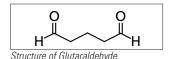


Structure of DEPC-Carbodiimide.

temperature in a desiccator before opening to avoid condensation. EDAC is extremely hydroscopic, and moisture will compromise its activity. It should have the appearance of a free-flowing white powder. Persistent hard clumps indicate moisture contamination. EDAC solutions should be prepared immediately prior to use. If possible, the headspace may be flooded with argon before the vial is re-sealed and stored. A sample coupling protocol is provided in PolyLink Technical Data Sheet 644.

GLUTARALDEHYDE, EM GRADE, 25%

Glutaraldehyde is a homobifunctional linker that is suitable for binding amine-containing ligands to amine-modified beads. We supply EM (electron microscopy)



grade glutaraldehyde in ampoules to ensure highest activity. EM Grade glutaraldehyde is diluted with distilled water to 25%, and adjusted to pH of approximately 5.5. The pre-scored glass ampoule can be easily snapped open with the ampoule cracker and added to the required buffer.

RELATED TECHNICAL LITERATURE

- 1. TDS 546 BioMag® Magnetic Immobilization Kit & BioMag® Amine
- TDS 617 BioMag®Plus Amine and BioMag®Plus Amine Protein Counting Kit
- 3. TDS 618 BioMag®Plus Carboxyl and BioMag®Plus Carboxyl Protein Coupling Kit
- 4. TDS 644 PolyLink Protein Coupling Kit

STORAGE AND SAFETY

Storage *EDAC*: Store desiccated at -20°C; *Glutaraldehyde*: Store at 4°C.

Safety *EDAC*: Do not breathe dust. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Wash thoroughly after handling.

Glutaraldehyde: Harmful if absorbed through skin. Wash thoroughly after handling. Open vial only under a hood. Wear protective gloves and safety goggles. Do not get in eyes or on skin or clothing. Avoid breathing vapors. Use only with adequate ventilation. Store at 4°C (39°F). Keep container closed.

In case of contact, immediately flush eye or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician. Wash clothing before re-use. See appropriate Safety Data Sheet for further information.

This product is for research use only and is not intended for use in humans or for *in vitro* diagnostic use.

ORDERING INFORMATION

Cat. #	Description	Sizes
BLI5288-1	DEPC-Carbodiimide (EDAC)	1g
BLI5288-5	DEPC-Carbodiimide (EDAC)	5g
BLI1909-10	Glutaraldehyde, EM Grade, 25%	10 x 10ml (ampoules)

TO ORDER

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