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TECHNICAL DATA SHEET

Methoxy Polyethylene Glycol benzaldehyde, mPEG-benzaldehyde

Catalog Numbers: PG1-BAL- 1k, 2k, 5k, 10k, 20k, 30k, 40k.

Synonym: mPEG-Bn-CHO, mPEG benzaldehyde, methoxyPEG benzaldehyde

Description:

Benzaldehyde functionalized methoxy polyethylene glycol (mPEG-benzaldehyde) is an aromatic, N-terminus amine (-NH $_2$) reactive aldehyde PEG that can be used to modify protein, peptide or other material surfaces containing primary amine groups. Benzaldehyde groups react with ϵ -amine of lysine residues and the α -amine at the N-terminus at pH 5.5 to 9.5. Reaction beween PEG benzaldehyde and amine forms an intermediate Schiff base. Further reduction with hydride will form a stable C-N bond. Reaction in higher pH will result in multiple Pegylation with both terminal and lysine groups. Compared with linear PEG aldehyde derivatives, aromatic aldehyde PEG derivatives have better stability in aqueous solution.

more information about using this product, visit www.nanocs.net.

Storage Conditions:

PEG benzaldehydes should be stored at -20 ^oC. Desiccate. Protect from light. Materials may be handled under inert gas for best stability. Re-test material after 6 months.

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

Product Structure:

$$\mathsf{CH_3O} - (\mathsf{CH_2CH_2O}) \mathsf{n} - \mathsf{CH_2CH_2} - \mathsf{NH} - \mathsf{C} - \bigvee_{l} \mathsf{C} - \mathsf{C} - \mathsf{H}_{l} = \mathsf{C} - \mathsf{H}_{l} - \mathsf{C} - \mathsf{C} - \mathsf{H}_{l} - \mathsf{C} - \mathsf{C}$$

Product Specifications:

Composition: mPEG benzaldehyde.

Appearance: White/Off-white solid or semi-

solid depends on molecular

weight.

Solubility: 10 mg/mL, clear in water,

chloroform, DMSO, DMF.

Stability: 6 months at -20 °C.

Handling and Use:

PEG benzaldehyde should always be kept in low temperature in dry condition. Prepare fresh solution right before use. Avoid frequent thaw and freezing. For

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