

PEG-MGF

PEG-MGF is a PEGylated synthetic peptide based on the E-peptide of mechano growth factor, a splice variant of insulin-like growth factor 1. The PEGylated form itself has little published characterization and no human evidence.

Evidence	Preclinical (animal and cell studies)
US status	Not FDA-approved for any use
WADA	Prohibited (S2)

PEGylated synthetic form of the mechano growth factor E-peptide; composition varies with the PEG used.

What the COA should show

PEG-MGF is difficult to characterize, and a certificate of analysis should state the exact peptide sequence, PEG molecular weight, attachment site and chemistry. Because PEG is polydisperse, mass spectrometry shows a distribution of masses rather than a single peak; MALDI-TOF is typically used, and the expected mass on this page applies only to the peptide portion. Free (un-PEGylated) peptide, multiply PEGylated species and free PEG should be quantified, often by size-exclusion or reverse-phase HPLC. Identity of the peptide portion should be confirmed, for example by analysis after cleavage or by peptide mapping. Net peptide content is particularly important because PEG contributes much of the mass.

Storage and stability

Store lyophilized PEG-MGF sealed at -20 °C or colder, protected from light and moisture, and allow vials to reach room temperature before opening. PEG chains can undergo oxidative degradation, and PEGylated material can be hygroscopic, so tight sealing is important. Prepare solutions in sterile water or buffer for lab use, keep them refrigerated for short-term work, aliquot for longer storage, and avoid repeated freeze-thaw cycles. Supplier-specific stability data are rarely available, which adds to uncertainty.

Full entry, references and latest research: <https://peptidewiki.net/compounds/peg-mgf/>
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