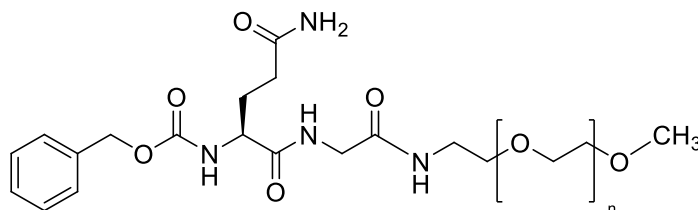


Product Data Sheet



Product number **C093**
Revision number **RN4.0**

Product Name Z-Gln-Gly-(PEG5,000), polydisperse
Quantity 25 mg
Application PEGylated glutamine donor substrate for transglutaminases
Molecular Weight ~ 5000
Chemical Structure



Purity by HPLC >90 % (214 nm)
Solubility High soluble in water
Reconstitution e.g. for the example application given below, 20 mg Z-Gln-Gly-(PEG5,000) were dissolved in 1 mL buffer (20 mM NaOAc, pH6) to obtain a 4 mM stock solution
Appearance Off-white solid
Storage Store at -20°C, desiccate
Application Protein labeling

A 29 kDa-protein (component CK from Substrate Finder Kit L001) is labeled with Z-Gln-Gly-(PEG5,000) using MTG (microbial transglutaminase) according to a modified protocol of the Substrate Finder Kit (L001). The result shown in Figure 1 reveals the increase in molecular weight of the protein (black arrow) up to the covalent incorporation of Z-Gln-Gly-(PEG5,000) (red arrow).

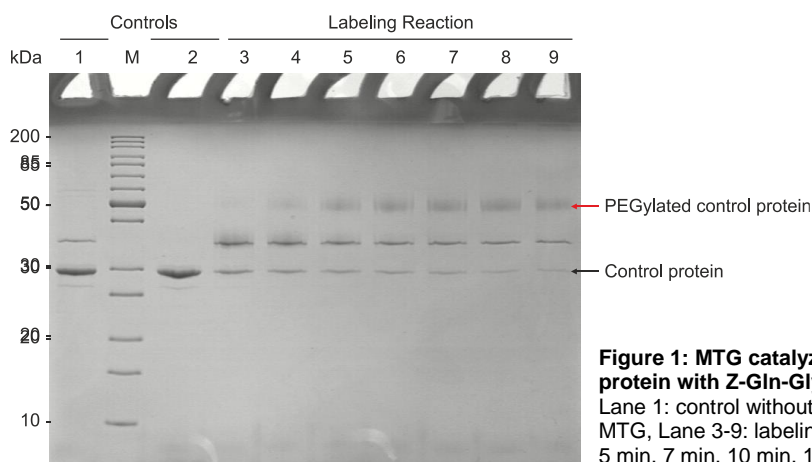


Figure 1: MTG catalyzed labeling of K-tagged control protein with Z-Gln-Gly-(PEG5,000).
Lane 1: control without PEG, Lane 2: control without MTG, Lane 3-9: labeling reaction after 1 min, 2 min, 5 min, 7 min, 10 min, 15 min, 30 min respectively.

Please see also MTG catalyzed PEGylation using (PEG1,088)amine (P010), (PEG5,000)amine (P011), or Z-Gln-Gly-(PEG1,088) (C092) as substrate in the corresponding product data sheets.

Product Data Sheet



Product number **C093**
Revision number **RN4.0**

Related products

T001	Bacterial transglutaminase highly purified
P010	(PEG1,088)amine, polydisperse
P011	(PEG5,000)amine, polydisperse
C092	Z-Gln-Gly-(PEG1,088), polydisperse
L001	Substrate Finder Kit
L203	PEG5,000 TGase Protein K-Labeling Kit

Reference(s)

Case, A. *et al. Biochemistry* **2007**, *46*, 1106.
Mero, A. *et al. J. Controlled Release* **2011**, *154*, 27.

Release date 02 December 2021

NOTE INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.