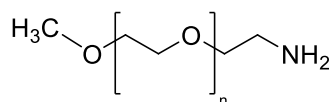


Product number **P011**  
Revision number **RN5.0**

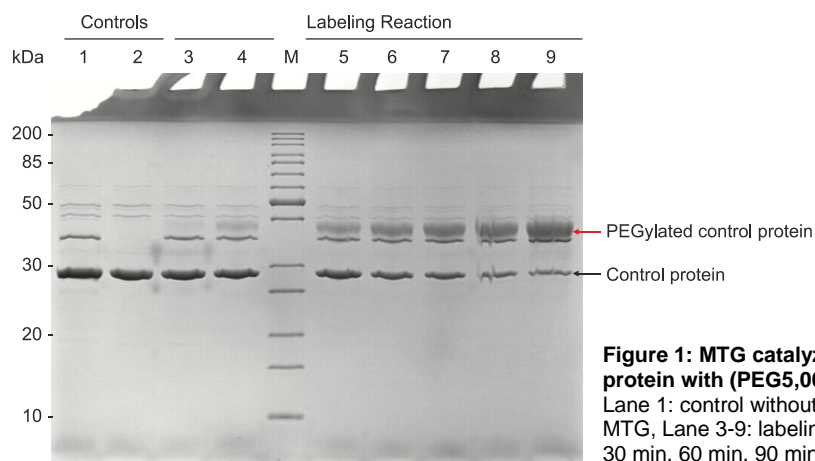
**Product Name** (PEG5,000)amine, polydisperse  
**Quantity** 10 mg  
**Application** PEGylated amine donor substrate for transglutaminases  
**Molecular Weight** ~ 5000  
**Chemical Structure**



**Purity by HPLC** >95 % (HPLC-ELSD)  
**Solubility** 50 mg/ml in 0.01 % (v/v) HCl  
**Reconstitution** e.g. for the example application given below, 20 mg (PEG5,000)amine were dissolved in 1 mL buffer (20 mM NaOAc, pH6) to obtain a 4 mM stock solution  
**Appearance** White powder  
**Storage** Store at -20°C, desiccate

## Application

Protein labeling  
A 28 kDa-protein (component CQ from Substrate Finder Kit L001) is labeled with (PEG5,000)amine 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 (PEG5,000)amine (red arrow).



**Figure 1: MTG catalyzed labeling of Q-tagged control protein with (PEG5,000)amine.**

Lane 1: control without PEG, Lane 2: control without MTG, Lane 3-9: labeling reaction after 5 min, 15 min, 30 min, 60 min, 90 min, 120 min, 180 min respectively.

Please see also MTG catalyzed PEGylation using (PEG1,088)amine (P010), Z-Gln-Gly-(PEG1,088) (C092) or Z-Gln-Gly-(PEG5,000) (C093) as substrate in the corresponding product data sheets.

# Product Data Sheet



Product number **P011**  
Revision number **RN5.0**

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**Related products**

T001	Bacterial transglutaminase highly purified
P010	(PEG1,088)amine, polydisperse
C092	Z-Gln-Gly-(PEG1,088), monodisperse
C093	Z-Gln-Gly-(PEG5,000), polydisperse
L001	Substrate Finder Kit
L103	PEG5,000 TGase Protein Q-Labeling Kit

**Reference(s)**

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

**Release date** 22 December 2021

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