

Product number **C102**
Revision number **RN2.0**

Product Name	MTG Blocker
Application	Blocking of enzymatic activity of microbial (bacterial) transglutaminase IC ₅₀ ~ 125 µM (Microbial Transglutaminase Assay Z009; Zedira, Germany)
Mode of action	Irreversible alkylation of the active site cysteine. C102 has a molecular weight of about 510 Da and consists of an electrophilic warhead and a peptidic backbone. First, the MTGs active site cysteinyl residue attacks the warhead. A subsequent reaction leads to the release of a leaving group. Finally, the peptidic backbone is irreversibly attached to the MTG active site. As a consequence, the mass of the enzyme increases +482 Da due to the attached peptidic backbone.
Molecular Formula	Not disclosed (Disclosure may be possible under a CDA)
Molecular Weight	~ 510
Purity by HPLC	>90 % (214 nm)
Solubility	2.5 mM in 0.5% (v/v) DMSO / aqueous buffers Pre-dissolve e.g. 10 mg (19.6 µmol) in 39.2 µl DMSO - dilute e.g. 10 µl of that stock solution (500 mM) with 1990 µl aqueous buffer to obtain a 2.5 mM solution. DMSO stock solutions are sterile and can be stored at -20°C for at least 6 months. To avoid too many freeze-thaw cycles, we strongly recommend storage of aliquots. Aqueous solutions are stable at room temperature for at least 3 days.
Appearance	Off-white solid
Storage	Store at -20°C, desiccate
Related products	T001 Bacterial transglutaminase Z009 Microbial Transglutaminase Assay Kit T036 Transglutaminase Assay Kit Further please refer to: "Background information Transglutaminase labelling" as well as "The biotechnological glue! Microbial Transglutaminase" (Zedira catalogue and homepage)
Reference(s)	Rickert, M. <i>et al. Protein Sci.</i> 2016 , 25, 442-455. Spycher, P.R. <i>et al. ChemBioChem</i> 2017 , 18, 1923-7.
Release date	02 December 2021
NOTE	INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.