

myTXTL® GamS Nuclease Inhibitor Protein

For use with myTXTL Sigma 70 Master Mix

The following quick start protocol applies to myTXTL GamS Inhibitor Protein catalog #501024 and #501096 in combination with myTXTL Sigma 70 Master Mix. When utilizing myTXTL GamS Inhibitor Protein with alternative cell-free expression systems, the optimum working concentration may differ and should be tested prior to use.

View the *myTXTL Cell-Free Expression Systems* handbook for detailed protocols, analyses and troubleshooting guidelines.

GamS Protein Stock Concentration

150 μ M

Recommended GamS Protein Working Concentration

10 μ M

Storage Temperature (long-term)

-20°C

Storage Buffer

10 mM Tris/HCl pH 7.5

PROTOCOL

1. Thaw all myTXTL Cell-Free Expression reagents (myTXTL GamS Inhibitor Protein, Sigma 70 Master Mix, linear DNA template) on ice.
2. Gently vortex myTXTL Sigma 70 Master Mix and briefly spin down. Carefully mix by pipetting prior to reaction setup while avoiding bubble formation. Briefly spin down all other reagent tubes.
3. On ice, combine reagents in a 1.5 mL or 2 mL microcentrifuge tube in the following order (allow for an incubation prior to adding the template DNA).

Reagents	myTXTL Negative Control	myTXTL Positive Control	myTXTL Sample Reaction	Cell-Free Expression Reaction
myTXTL Sigma 70 Master Mix	9 μ L	9 μ L	9 μ L	–
myTXTL GamS Inhibitor Protein	0.8 μ L	0.8 μ L	0.8 μ L	X μ L
Incubate 5 min on ice.				
Linear Control Fragment P70a-deGFP	–	2.2 μ L	–	–
Linear Template (final conc. 1-50 nM)	–	–	X μ L	X μ L
Nuclease-Free Water	To 12 μ L	To 12 μ L	To 12 μ L	To X μ L

4. Briefly vortex reaction and spin down for 2-3 seconds.
5. Incubate myTXTL reaction at 29°C for up to 16 hours.
6. Stop myTXTL reaction by placing it on ice. Immediately analyze or store at -20°C for later use.