

# Data Sheet

## Plasmid #32

SKU No.: 02-1032

Description	Plasmid #32 enables target proteins to be labeled with an uncleavable N-terminal His8 and a cleavable C-terminal CL7 tag.
Expression	Transcription is induced with IPTG and driven by the T7 RNA polymerase. The plasmid is designed for expression in E. Coli.
Affinity Tag	The C-terminal CL7 tag is downstream of three PreScission protease (PSC) and one Sortase A (SRT) cleavage site.
Cleavage Site(s)	An N-terminal SUMO cleavage site exists upstream of the His8 tag. One SRT and three PSC cleavage sites exist between the target protein and the CL7 tag.
Other Tags	Plasmid #32 includes N-terminal Trx and His8 tags.
Resistance	Kanamycin
Form	100 ng, dissolved in $H_2O$ .
Concentration	30 ng/μL
Stability	12 months after shipping
Storage	-20° C
Shipping	Room temperature

#### Scheme

1. HindIII/SpeI Insertion Site – Trx | SUMO | His8 | Gene of Interest | SRT | PSC | PSC | PSC | CL7 This insertion scheme results in 16 extra aa (including His8 tag) at the N terminus of the target following SUMO protease cleavage.

2. KpnI/SpeI Insertion Site – Trx | SUMO | His8 | Gene of Interest | SRT | PSC | PSC | PSC | CL7 This insertion scheme results in 11 extra aa (including His8 tag) at the N terminus of the target following SUMO protease cleavage.

3. Bsu36I/SpeI Insertion Site – Trx | SUMO | Gene of Interest | SRT | PSC | PSC | PSC | CL7 This insertion scheme maintains the Gene of Interest's wildtype sequence, without adding any extra residues. The N-terminus of the Gene of Interest must include the following to complete the SUMO C-terminal sequence:

P E D L D M E D N D I I E A H R E Q I G G CCTGAGGATCTGGACATGGAAGACAATGACATTATCGAAGCTCATCGTGAACAGATTGGTGGT<Gene of Interest> Bsu361

## You can download the full protocol from <u>https://trialtusbioscience.com/products/#protocols</u>.

## For research use only. Not for diagnostic or therapeutic use.

Licensing Information TriAltus Bioscience holds the exclusive, worldwide license to the CL7 protein purification technology platform. It was licensed from the University of Alabama at Birmingham (UAB) in Birmingham, Alabama, USA. An international patent filing has been made with protection being sought in the University Europe, and other major markets. The CL7 purification technology is available for research use. For commercial use or resale, contact us at sales@trialtusbioscience.com to discuss commercial licensing.

#### Trademarks

The Company name, the terms "Trialtus" and "Trialtus Bioscience", the Company logo, and all related names, logos, product and service names, designs, and slogans are trademarks of the Company or its affiliates or licensors. You must not use such marks without the prior written permission of the Company. All other names, logos, product and service names, designs, and slogans on this Website are the trademarks of their respective owners.

Version: 1.0 Revision Date: 11/20/2019