

## Data Sheet

### Plasmid #21

SKU No.: 02-1021

<b>Description</b>	Plasmid #21 enables target proteins to be tagged with N-terminal CL7 and His8. There are three options for the 5' placement of target genes, and XhoI is the 3' cloning site.
<b>Expression</b>	Transcription is induced with IPTG and driven by the T7 RNA polymerase. The plasmid is designed for expression in E. Coli.
<b>Affinity Tag</b>	The N-terminal CL7 tag is upstream of several protease cleavage sites and a His8 tag.
<b>Cleavage Site(s)</b>	Plasmid #21 contains two PreScission protease (PSC) cleavage sites between the CL7 and His8 tags. Downstream of the His8 tag are SUMO and Sortase A cleavage sites.
<b>Other Tags</b>	The coding region begins with an N-terminal Trx tag and includes a His8 tag between the PSC and SUMO cleavage sites, upstream of the target protein.
<b>Resistance</b>	Kanamycin
<b>Form</b>	100 ng, dissolved in water.
<b>Concentration</b>	30 ng/μL
<b>Stability</b>	12 months after shipping
<b>Storage</b>	-20° C
<b>Shipping</b>	Room temperature

### Scheme

1. HindIII/XhoI Insertion Site – Trx | CL7 | PSC | 44-Amino Acid Linker | PSC | His8 Tag | SUMO | 13-Amino Acid Linker | SRT | Gene of Interest
2. KpnI/XhoI Insertion Site – Trx | CL7 | PSC | 44-Amino Acid Linker | PSC | His8 Tag | SUMO | 3-Amino Acid Linker | Gene of Interest
3. Bsu36I/XhoI Insertion Site – Trx | CL7 | PSC | 44-Amino Acid Linker | PSC | His8 Tag | SUMO | Gene of Interest

The Bsu36I/XhoI 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 sequence 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  
**CCTGAGG**ATCTGGACATGGAAGACAATGACATTATCGAAGCTCATCGTGAACAGATTGGTGGT<Gene of Interest>  
**Bsu36I**

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

**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 United States, 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](mailto: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