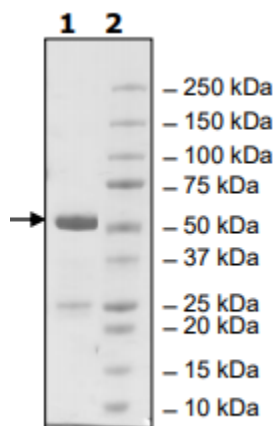


## Product Information

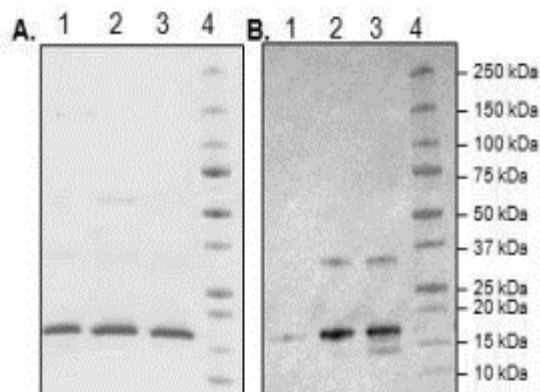
<b>Construct:</b>	BirA ( <i>E. coli</i> ) (GST-2-321(end))
<b>Concentration:</b>	1.25 mg/ml
<b>Species:</b>	<i>E. coli</i>
<b>Formulated In:</b>	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 16 mM glutathione, 3 mM DTT, and 20% glycerol.
<b>Expression System:</b>	<i>E. coli</i>
<b>Format:</b>	Aqueous buffer solution
<b>Stability:</b>	At least 6 months at -80°C. Avoid freeze/thaw cycles.
<b>Storage:</b>	-80°C
<b>Genbank Accession:</b>	NP_418404
<b>MW:</b>	61 kDa
<b>Purity:</b>	78%
<b>Assay Conditions:</b>	BirA (16 µg/ml) completely biotinylated 10 µM of Avi-tag substrate at 30°C for 30 minutes in reaction buffer containing 50 mM Bicine pH 8.3, 10 mM ATP, 10 mM MgOAc, and 50 µM d-Biotin.
<b>Applications:</b>	Useful for covalently biotin-labeling of acceptor proteins for detection and purification assays.

## Quality Control Data

### 4-20% SDS-Page Coomassie Staining



### BirA Biotinylation Assay



BRD4-Avi biotin-labeling with GST-BirA using the reaction conditions as outlined in Enzyme Activity. **A.** Coomassie blue stained gel showing (1) unbiotinylated BRD4-Avi, (2) GST-BirA/BRD4-Avi, (3) BRD4-Avi-biotin control and (4) protein markers (BioRad, #161-0374). **B.** The corresponding Western blot probed with Streptavidin-HRP and developed with ECL reagent.