

## Product Datasheet

### BirA Protein, E. coli, Recombinant (His & MBP) (orb1956064)

<b>Catalog Number</b>	orb1956064
<b>Description</b>	<p>The enzyme BirA is a key reagent because of its ability to biotinylate proteins at a specific residue in a recognition sequence. This enzyme is used to biotinylate the C termini of membrane proteins, allowing these proteins to be tetramerized by binding to streptavidin. Because of the specificity of the biotinylation at the C terminus, the orientation of the membrane proteins on the streptavidin is equivalent to that of the native protein on the cell surface. These tetrameric proteins can be used to study protein receptor-ligand interactions at the cell surface, and site-specific biotinylation can be used to study proteins in vitro using a defined orientation. The biotinylation of histones by BirA ligase is consistent with the proposed role of human HCS in chromatin. The N-terminal BirA domain is required for both transcriptional regulation of biotin synthesis and biotin protein ligase activity.</p>
<b>Storage</b>	-20°C
<b>Tag</b>	His, MBP
<b>Note</b>	For research use only
<b>Application notes</b>	A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.
<b>Purity</b>	94.80%
<b>MW</b>	78.3 kDa (predicted); 64-68 kDa (reducing conditions)
<b>Uniprot ID</b>	<b>P06709</b>
<b>Expiration Date</b>	6 months from date of receipt.

#### Biorbyt Ltd.

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

#### Biorbyt LLC.

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)