

**BA254****Native Escherichia coli beta Galactosidase**

<b>Alternate names:</b>	Beta-Gal Fusion Protein, Beta-Gal tag, JW0335, Lactase, b0344, lacZ tag
<b>Quantity:</b>	5 mg
<b>Background:</b>	Escherichia coli Beta-Galactosidase is an inducible tetrameric enzyme coded by the lac Z gene of the lac operon that is often used as a reporter to assess the efficiency of transfection. It is a metalloenzyme that splits lactose into glucose and galactose. It hydrolyzes terminal, non-reducing beta-D-galactose residues in beta-D-galactosides.
<b>Uniprot ID:</b>	<a href="#">P00722</a>
<b>NCBI:</b>	<a href="#">AP_000996.1</a>
<b>GeneID:</b>	<a href="#">945006</a>
<b>Species:</b>	E. coli
<b>Source:</b>	E.coli
<b>Format:</b>	<b>State:</b> Lyophilized purified protein from <i>Escherichia coli</i> <b>Purity:</b> 600U/mg <b>Buffer System:</b> PBS <b>Stabilizers:</b> 74% Sucrose <b>Reconstitution:</b> Restore with sterile distilled water or a dilute buffer of choice. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. We recommend that the vial is gently mixed after reconstitution.
<b>Applications:</b>	<b>Functional Assays.</b> Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Description:</b>	Purified Beta-Galactosidase from E.coli. <b>Specific Activity:</b> > 600 U/mg protein. One unit hydrolyses 1 µmole of p-nitrophenol-b-D-galactoside to p-nitrophenol per minute at 37°C. <b>Molecular weight:</b> 540 kDa
<b>Storage:</b>	Prior to reconstitution store at 2-8°C. Following reconstitution store the protein undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. CAS number 9031-11-2. 2. EC 3.2.1.23.