Recombinant E.coli Lactose Operon Repressor/LacI Protein (His Tag)

Catalog Number: PDEO100019

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

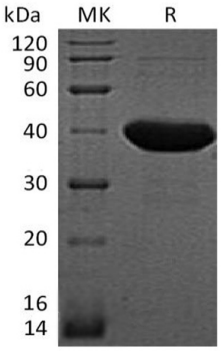
Description

Species	E.coli
Source	E.coli-derived E.coli LacI protein Met1-Gln360, with an C-terminal His
Calculated MW	39.4 kDa
Observed MW	40 kDa
Accession	P03023
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Lactose operon repressor (LacI) contains one HTH lacI-type DNA-binding domain, functions as a homotetramer. Lactose operon repressor as a repressor of the lactose operon, which also as an inducer, binds allolactose. If remove residues 1-59, resulting the loss of DNA-binding activity but retains tetrameric structure and inducer-binding activity. If delete residues 340-360, resulting the loss of tetramer formation, but retains dimer formation, inducer-binding activity, and DNA-binding activity.