

Beta-D-Galactoside Galactohydrolase

Product Information

Cat#	DIA-426
Description	β -Galactosidase is a tetrameric enzyme (135 kDa per subunit) containing sulfhydryl groups and multiple cysteine residues. It is widely used as a reporter enzyme for monitoring gene expression and in enzymatic assays such as ELISA.
Form	Powder
Activity	≥ 400 U/mg protein
Enzyme Commission Number	EC 3.2.1.23
Purity	$\geq 80.0\%$ (SDS-PAGE)
Applications	Immunoassays (ELISA): β-Galactosidase can be conjugated to antibodies that specifically recognize target molecules for use in enzyme-linked immunosorbent assays. Reporter Enzyme: It serves as a reporter enzyme to monitor gene expression levels driven by specific promoters. Positive Control: It can be used as a positive control protein in assays involving anti-β-galactosidase antibodies.
Appearance	White amorphous powder
Function	β -Galactosidase hydrolyzes lactose into its monosaccharide components, glucose and galactose. Additionally, it catalyzes the transglycosylation of glucose to produce allolactose, which functions as an inducer of β -galactosidase in feedback regulation.