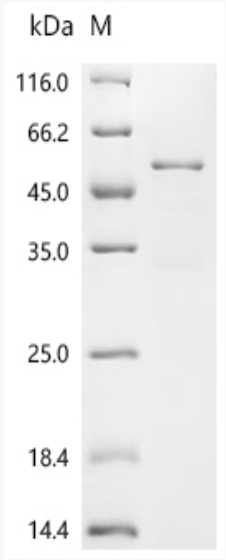
for research use only

Certificate of Analysis

Product Name	Recombinant SaccharoMyces cerevisiae Site-specific recombinase Flp (FLP1)		
Catalog Number	**AAA18624**		
Expression host	*E.coli*		
Tag Info	N-terminal 6xHis-tagged		
Buffer	Lyophilized from 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0 The volume before lyophilization is 100μl/vial.		
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20℃/-80℃. Our default final concentration of glycerol is 50%. Customers could use it as reference.		
Batch Number	DA05252b1g0		
Nature	SaccharoMyces cerevisiae FLP1-(AA 1-423)-**P03870**-Full Length		
Purification	Affinity purified using IMAC		
Recommended Storage	Short term	2 to 8 ℃, one week after reconstitution	
	Long term	-20 to -80 ℃, twelve months from the date of receipt	
Form	Lyophilized powder		
Date of detection	2024.09.23		
Test Items	**Specifications**		**Results**
Purity	≥85%,by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.		85%
Molecular Weight	Predicted band size: 54.1 kDa		Observed band size: 54 kDa

Electrophoretic parameters	(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
Aseptic Processing	Not done
Endotoxin Level	Untreated
Activity	Not tested
Conclusion	pass

Datasheet

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Buffer	Lyophilized from 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0 The volume before lyophilization is 100μl/vial.
Storage	Store at -20℃, for extended storage, conserve at -20℃ or -80℃.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4℃ for up to one week.
Relevance	Part of the plasmid amplification system, which corrects any decrease in copy number caused by a rare missegregation event. Catalyzes the recombination between the large inverted repetitions of the 2-micron plasmid during plasmid replication. This recombination event changes the direction of one of the two replication forks in the bidirectionally replicating molecule, effectively resulting in multiple rounds of replication from a single initiation event. Binds specifically to the FLP recognition target (FRT) site where it induces DNA to bend. Three types of bend exist. Type I is approximately 60 degrees and results from 1 FLP molecule binding to 1 symmetry element. Type II is >144 degrees and results from FLP molecules binding to symmetry elements a and b. Type III is approximately 65 degrees and results from FLP molecules binding to symmetry elements b and c.
AA sequence	MPQFGILCKTPPKVLVRQFVERFERPSGEKIALCAAELTYLCWMITHNGTAIKRATFMSYNTIISNSLSFDIVNKS LQFKYKTQKATILEASLKKLIPAWEFTIIPYYGQKHQSDITDIVSSLQLQFESSEEADKGNSHSKKMLKALLSEGES IWEITEKILNSFEYTSRFTKTKTLYQFLFLATFINCGRFSDIKNVDPKSFKLVQNKYLGVIIQCLVTETKTSVSRHIYF FSARGRIDPLVYLDEFLRNSEPVLKRVNRTGNSSSNKQEYQLLKDNLVRSYNKALKKNAPYSIFAIKNGPKSHIG RHLMTSFLSMKGLTELTNVVGNWSDKRASAVARTTYTHQITAIPDHYFALVSRYYAYDPISKEMIALKDETNPI EEWQHIEQLKGSAEGSIRYPAWNGIISQEVLDYLSSYINRRI