

Data Sheet

pASK-IBA17plus

Cat. No. : 2-1416-000

Lot No.: 1416 -

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Description	Expression plasmid. The expression cassette is under transcriptional control of the tetracycline promoter/operator. The expressed recombinant protein will be localized in the cytoplasm.
Affinity tag	<i>Strep</i> -Tactin affinity tag (<i>Strep</i> -tag II) for the purification of recombinant protein. The affinity tag is fused to the N-terminus of the recombinant protein and can be removed by cleavage with TEV protease (tobacco etch virus). TEV protease is a site-specific protease with a seven amino acid recognition site (in pASK-IBA17plus: ENLYFQG) and cleavage occurs between glutamine (Q) and glycine (G).
Bacterial Expression	Expression is induced upon addition of 200 µg anhydrotetracycline (order no.: 2-0401-001; 2-0401-002) per 1 liter <i>E. coli</i> shaking culture ($A_{550} = 0.5$).
Expression strain	Any <i>E. coli</i> strain. The <i>tet</i> -promoter works independently from the genetic background of <i>E. coli</i> .
Resistance	Ampicillin
Form	5 µg, dissolved in 10 mM Tris/HCl pH 8.0, 1 mM EDTA; 20 µl
Concentration	250 ng/µl
Storage	4 °C for frequent usage, -20 °C for long-term storage

For research use only

Strep-tag® technology for protein purification and detection is covered by US patent 5,506,121, UK patent 2272698 and French patent 93 13 066; the tetracycline promoter based expression system is covered by US patent 5,849,576 and *Strep*-Tactin® is covered by US patent 6,103,493. Further patent applications are pending world-wide. Purchase of reagents related to these technologies from IBA provides a license for non-profit and in-house research use only. Expression or purification or other applications of above mentioned technologies for commercial use require a separate license from IBA. A license may be granted by IBA on a case-by-case basis, and is entirely at IBA's discretion. Please contact IBA for further information on licenses for commercial use. *Strep*-tag® and *Strep*-Tactin® are registered trademarks of IBA GmbH.

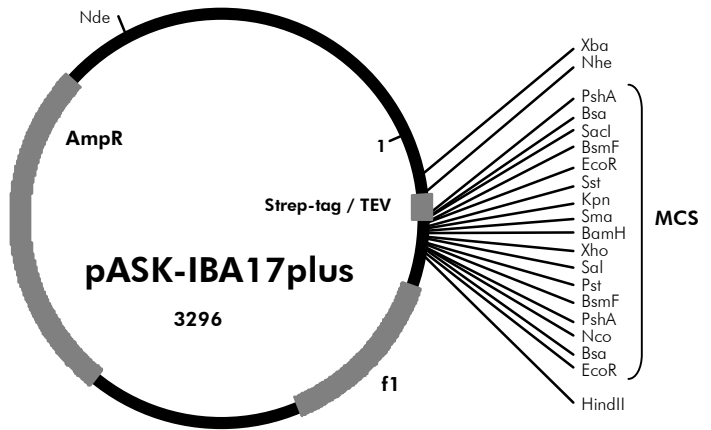
Multiple Cloning Site of pASK-IBA17plus

1	CCATCGAATGGCCAGATGATTAATTCCTAATTTTTGTGAC	41
42	ACTCTATCATTGATAGAGTTATTTTACCACTCCCTATCAGTGATAGAGAAAAGTGAAATGAATAGTTCGACAAAAATCTA	121
	forward primer	XbaI
	link Streptag linker	
	M A S W S H P Q F E K S G G	
122	GAAATAATTTGTTTAACTTTAAGAAGGAGATATACAAATGGCTAGCTGGAGCCACCCGAGTTCGAAAAATCTGGTGGT	201
	NheI	
	TEV protease	
	G G G E N L Y F Q G A E T A V P N S S S V P G D P S R	
202	GGTGGTGGTGAGAATCTTTATTTTCAGGgagcCGAGACCGGGTCCCGAATTCGAGCTCGGTACCCGGGGATCCCTCGAG	281
	BbeI BsaI BsmFI SstI KpnI BamHI	
	EheI PshAI EcoRI SmaI XhoI	
	KasI SacII	
	NarI	
	V D L Q G D H G L *	
	G R P A G G P W S L I S N *	
	S T C R G G T M V S D I *	
282	GTCGACCTGCAGGGGGACCATGGTCTCTgataCTAACTAAGCTTGACCTGTGAAGTGAAAAATGGCGCACATTGTGCGA	361
	SalI PstI BsmFI BsaI EcoRV HindIII	
	PshAI	
	NcoI	
362	CATTTTTTTTGTCTGCGCTTACCGCTACTGCGTCACGGATCTCCACGCGCCCTGTAGCGGCGCATTAAAGCGCGGCGGGT	441
	reverse primer	

Please note: Restriction enzymes in bold cut twice. The *BsaI* sites (isoschizomer of *Eco31I*) at each end of the multiple cloning site are useful for precise and oriented insertion of the recombinant gene by one cleavage reaction only. The “link” contains a restriction site which can be used e.g. for subcloning the recombinant gene into pEXPR-IBA vectors for mammalian expression.

Features of pASK-IBA17plus

	from bp	to bp
promoter	37	72
forward primer binding site	57	76
Strep-tag	160	192
TEV cleavage site	211	231
multiple cloning site	232	318
reverse primer binding site	378	394
f1 origin	407	845
AmpR resistance gene	994	1854
Tet-repressor	1864	2489



Cloning primers for the precise cloning using <i>BsaI</i> or <i>Eco31I</i>	Sequencing primers:
Forward: 5'- NNNNNNGGTCTCNGC GCC (N ₂₀) NNN NNN...	Forward: 5'- GAGTTATTTTACCACTCCCT -3'
Reverse: 5'- NNNNNNGGTCTCNTA TCA (N ₂₀) NNN NNN...	Reverse: 5'- CGCAGTAGCGGTAAACG -3'