

## Data Sheet

**IBA Headquarters**  
IBA GmbH  
Rudolf-Wissell-Str. 28  
D-37079 Göttingen  
Germany  
Tel. +49 (0) 551-5 06 72-0  
Fax +49 (0) 551-5 06 72-181  
E-mail [info@iba-go.com](mailto:info@iba-go.com)  
<http://www.iba-go.com>

**IBA US Distribution Center**  
10748 Indian Head Industrial  
Blvd.  
St. Louis, MO 63132  
USA  
Tel. 1-877-IBA-GmbH  
(1-877-422-4624)  
Fax 1-888-531-6813  
E-mail [info@iba-go.com](mailto:info@iba-go.com)  
<http://www.iba-go.com>

# pASK-IBA37plus

Cat. No. : 2-1437-000

Lot No.: 1437-

Last date of revision  
**May 10**

Version 1437-9

<b>Description</b>	Expression plasmid. The expression cassette is under transcriptional control of the tetracycline promoter/operator. The expressed recombinant protein will be localized in the cytoplasm.
<b>Affinity tag</b>	6xHistidine-tag 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 factor Xa.
<b>Bacterial Expression</b>	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 ( $A_{550} = 0.5$ ).
<b>Expression strain</b>	Any <i>E. coli</i> strain. The <i>tet</i> -promoter works independently from the genetic background of <i>E. coli</i> .
<b>Resistance</b>	Ampicillin
<b>Form</b>	5 µg, dissolved in 10 mM Tris/HCl pH 8.0, 1 mM EDTA; 20 µl
<b>Concentration</b>	250 ng/µl
<b>Storage</b>	4 °C for frequent usage, -20 °C for long-term storage

## For research use only

### Important licensing information

This product is based on 6xHistidine-tag and tet promoter technologies covered by intellectual property (IP) rights and on completion of the sale IBA grants respective Limited Use Label Licenses to purchaser. IP rights and Limited Use Label Licenses for said technology are further described and identified at <http://www.iba-go.com/patents.html> or upon inquiry at [info@iba-go.com](mailto:info@iba-go.com) or at IBA GmbH, Rudolf-Wissell-Str. 28, 37079 Göttingen, Germany. By use of this product the purchaser accepts the terms and conditions of all applicable Limited Use Label Licenses.

### Trademark information

The owners of trademarks marked by "®" or "TM" are identified at <http://www.iba-go.com/patents.html>. Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

## Multiple Cloning Site of pASK-IBA37plus

```

1      CCATCGAATGGCCAGATGATTAATTCCTAATTTTGTGGACTCTATCATTGATAGAGTTATTTTACCACTCCCTATC 79
                                     forward primer

80     AGTGATAGAGAAAAGTGAATAGTAGTTCGACAAAAATCTAGAAATAATTTGTTAACTTTAAGAAGGAGATATACAA 159
                                     XbaI

          link          6xHistidine-tag      factor Xa      R P R S R I R A R Y
          M A S R G S H H H H H H I E G R R D R G P E F E L G T
160    ATGGCTAGCAGAGGATCGCATCACCATCACCATCACATCGAAGGgcgCGAGACCGGGTCCCGAATTCGAGCTCGGTAC 239
          NheI                                     BbeI BsaI BsmFI SstI KpnI
          EheI PshAI EcoRI SmaI
          KasI SacII
          NarI

          P G I P R G R P A G G P W S L I S N *
          P G D P S R S T C R G T M V S D I *
          R G S L E V D L Q G D H G L *

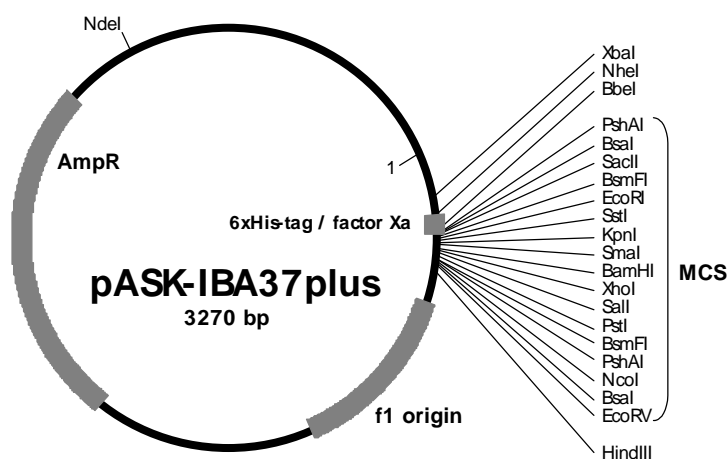
240    CCGGGATCCCTCGAGGTCGACCTGCAGGGGACCATGGTCTCTgataTCTAACTAAGCTTGACCTGTGAAGTGA AAAAT 319
          BamHI Sall PstI BsmFI BsaI EcoRV HindIII
          XhoI PshAI
          NcoI

320    GGCGCACATTGTGCGACATTTTTTTTGTCTGCCGTTTACCGCTACTGCGTCCACGGATCTCCACGCGCCCTGTAGCGGCGC 399
                                     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-IBA37plus

	from bp	to bp
promoter	37	72
forward primer binding site	57	76
6xHistidine-tag	160	195
factor Xa cleavage site	196	207
multiple cloning site	208	284
reverse primer binding site	352	368
f1 origin	381	819
AmpR resistance gene	968	1828
tet-repressor	1838	2461
Col E1 origin	2614	3202



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