

Data Sheet

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pEXPR-IBA5

Cat. no. : 2-1905-000

Lot no.: 1905-

Last date of revision
July 05

Version 1905-5

| | |
|---|---|
| Description | Eukaryotic expression vector designed for high-level stable and non-replicative transient expression in most mammalian hosts containing the following elements: <ul style="list-style-type: none"> • Human cytomegalovirus (CMV) immediate-early promoter for high-level expression in a wide range of mammalian cells • Multiple cloning site • Neomycin resistance gene for selection of stable cell lines • Episomal replication in cell lines that are latently infected with SV40 or that express the SV40 large T antigen (e.g. COS-1, COS-7) • The expressed recombinant protein will be localized in the cytoplasm. • <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. |
| Resistance for selection in <i>E. coli</i> | Ampicillin |
| Form | 5 µg, dissolved in TE buffer (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 |
| Shipment | Room temperature |

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.

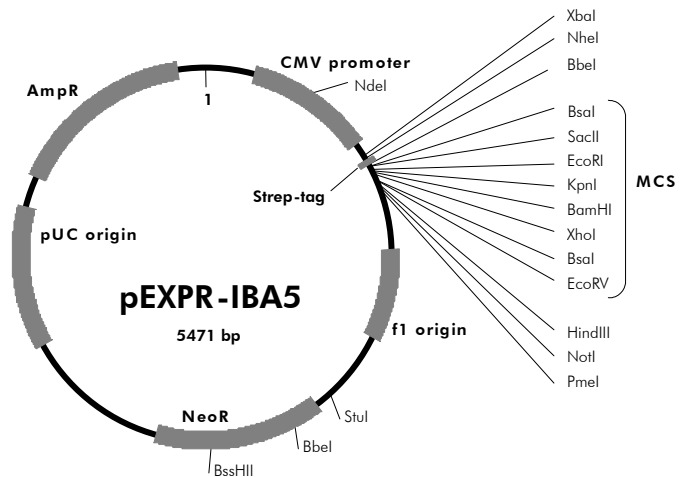
Multiple Cloning Site of pEXPR-IBA5

| | | |
|------|---|------|
| 721 | AAAATCAACGGGACTTTCCAAAATGTCGTAACAACCTCCGCCCATTCACGCAAATGGGCGGTAGGCGGTACGGTGGGAG | 800 |
| | CAAT | |
| 801 | GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAG | 880 |
| | TATA forward primer | |
| | <div style="display: flex; justify-content: space-around; font-size: small;"> Strep-tag link D R G P E F E L </div> <div style="display: flex; justify-content: space-around; font-size: x-small;"> M A S W S H P Q F E K G A E T A V P N S S S R P R S R I R A R </div> | |
| 881 | GGTCTAGACCCACCATGGCTAGCTGGAGCCACCCGAGTTCGAAAAGg g cg g CGAGACCGCGGTCCC G AATTCGAGCTCG | 960 |
| | <div style="display: flex; justify-content: space-between; font-size: x-small;"> XbaI NheI BbeI BsaI EcoRI KpnI </div> <div style="display: flex; justify-content: center; font-size: x-small;"> EheI SacII </div> <div style="display: flex; justify-content: center; font-size: x-small;"> KasI </div> <div style="display: flex; justify-content: center; font-size: x-small;"> NarI </div> | |
| | <div style="display: flex; justify-content: space-around; font-size: x-small;"> G T R G S L E V D L Q G D H G L * </div> <div style="display: flex; justify-content: space-around; font-size: x-small;"> Y P G I P R G R P A G G P W S L I S N * </div> <div style="display: flex; justify-content: space-around; font-size: x-small;"> V P G D P S R S T C R G T M V S D I * </div> | |
| 961 | GTACCCGGGGATCCCTCGAGGTCGACCTGCAGGGGACCATGGTCTCTgataTCTAACTAAGCTTGGCGCCGAGATCTA | 1040 |
| | <div style="display: flex; justify-content: space-between; font-size: x-small;"> BamHI BsaI EcoRV HindIII </div> <div style="display: flex; justify-content: center; font-size: x-small;"> XhoI NotI </div> | |
| 1041 | GCTTAAGTTTAAACCGCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGCCCCCTCCCCGTCCT | 1120 |
| | PmeI reverse primer | |

Please note: Restriction enzymes in bold cut twice, however, not all multiple cutting restriction enzymes are shown. 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 pASK-IBA vectors for bacterial expression.

Features of pEXPR-IBA5

| | from bp | to bp |
|-----------------------------|---------|-------|
| CMV promoter | 232 | 819 |
| forward primer binding site | 832 | 852 |
| Strep-tag | 904 | 927 |
| multiple cloning site | 928 | 1011 |
| reverse primer binding site | 1065 | 1082 |
| f1 origin | 1341 | 1769 |
| Neomycin resistance gene | 2179 | 2973 |
| pUC origin | 3660 | 4330 |
| Ampicillin resistance gene | 4475 | 5335 |



| | |
|--|---|
| <p>Cloning primers for the precise cloning using <i>BsaI</i> or <i>Eco31I</i></p> <p>Forward: 5'-NNNNNNGGTCTCNGC GCC ^(N₂₀) NNN NNN ...</p> <p>Reverse: 5'-NNNNNNGGTCTCNTA TCA ^(N₂₀) NNN NNN ...</p> | <p>Sequencing primers:</p> <p>Forward: 5'- GAGAACCCTGCTTACTGGC -3'</p> <p>Reverse: 5'- TAGAAGCACAGTCGAGG -3'</p> |
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