



INSTITUTE  
FOR RESEARCH  
IN BIOMEDICINE

## Available pOPIN and pPEU In-Fusion™ based Vectors

pOPINE	C-terminal His-tag	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AGGAGATATACCATG	GTGATGGTGATGTT
pOPINF	N-terminal His-tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pOPING	Mammalian cleavable secretion leader and C-terminal His-tag	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	GCGTAGCTGAAACCGGC	GTGATGGTGATGTTT
pOPINJ	N-terminal His-GST tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pOPINM	N-terminal His-MBP tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pOPINFS	N-terminal His-tag with 3C protease site and C-terminal StrepII tag	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	GGTGGCTCCAGCTAGC
pOPINS	N-terminal His-SUMO tag	<i>E. coli</i> ONLY	GCGAACAGATCGGTGGT	ATGGTCTAGAAAGCTTIA
pPEU1	N-terminal GST tag with 3C protease site and C-terminal His-tag	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	GTGATGGTGATGTTT
pPEU2	N-terminal His-eGFP tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pPEU3	N-terminal His-Cherry tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pPEU4	C-terminal eGFP-His tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AGGAGATATACCATG	CTCCAGACCGCTTGA
pPEU5	C-terminal Cherry-His tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AGGAGATATACCATG	CTCCAGACCGCTTGA
pPEU6	N-terminal StrepII-eGFP tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pPEU7	N-terminal StrepII-Cherry tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pPEU8	C-terminal eGFP-StrepII tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AGGAGATATACCATG	CTCCAGACCGCTTGA
pPEU9	C-terminal Cherry-StrepII tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AGGAGATATACCATG	CTCCAGACCGCTTGA
pPEU10	N-terminal His-Thioredoxin tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA
pPEU11	N-terminal His-Z-tag with 3C protease site	<i>E. coli</i> , mammalian cells, insect cells (via baculovirus)	AAGTTCTGTTTCAGGGCCCG	ATGGTCTAGAAAGCTTIA

Most tags are removable by 3C, SUMO or Carboxypeptidase A proteases. The pOPIN vector suite was developed at OPPF, the pPEU suite developed at IRB PECF. Green/Purple colour coding represents conserved primer sequences such that one PCR product can be cloned into more than one expression vector. Please Note for N-terminal fusions a stop codon is included in the reverse primer e.g. underlined in pOPINF reverse primer. Similarly for C-terminal fusions a start codon is included in the forward primer e.g. underlined in pOPINE forward primer.