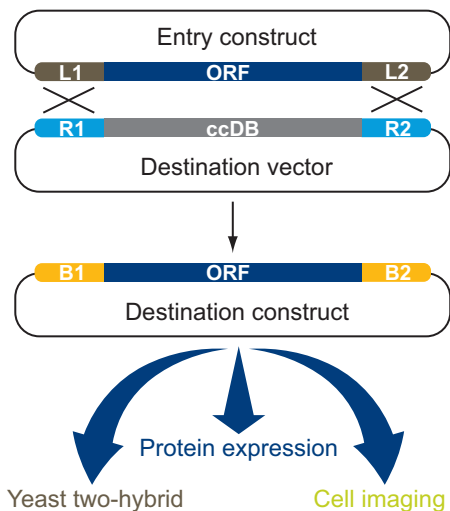


# Human ORF Collection

## For easily moving thousands of open reading frames into your choice of protein expression systems

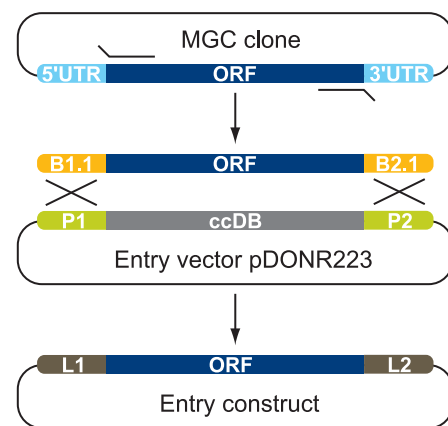
The Center for Cancer Systems Biology of the Dana-Farber Institute has created a path-breaking collection of ORF-only clones (full-length cDNAs with UTRs removed) beginning with over 8000 human genes<sup>1</sup> and with future updates planned. These clones are derived from fully sequenced Mammalian Gene Collection (MGC) full-length cDNAs and cloned into a recombinational entry vector.

### ORF CLONE APPLICATION



Each Human ORF may be transferred to a Gateway<sup>®</sup> compatible destination vector by homologous recombination. The resulting destination construct is ready for ORF protein expression in a range of functional genomics applications, including yeast two-hybrid screens, protein overexpression and purification, and intracellular protein imaging.

### ORF CLONE CONSTRUCTION



Human ORF clones were created by PCR amplification of the MGC full-length clone coding region followed by recombinational insertion into the Gateway entry vector pDONR223.

- **TIME SAVINGS:** ORF clones provide a shortcut to protein expression, allowing you to skip PCR, cloning into an expression vector, and verifying the ends of the ORF DNA sequence.
- **HIGH FIDELITY:** Each CDS was amplified for only 25 cycles with gene-specific primers and KOD HiFi Polymerase<sup>2</sup>, greatly minimizing the risk of PCR-induced mutations.
- **EASE OF TRANSFER:** The Gateway entry vectors ensure easy transfer into prokaryotic, mammalian, viral, or insect expression systems. For maximum flexibility, the ORF stop codon has been removed.

<sup>1</sup>Rual, JR *et al* (2004). Human ORFeome Version 1.1: a platform for reverse proteomics. *Genome Research* **14**, 2128–2135

<sup>2</sup>KOD HiFi Polymerase is supplied by Novagen.

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## ONLINE CLONE QUERY

Individual ORF clones can be easily found by clone ID, accession number, or gene symbol using our online Query Tool (see above). Alternatively, clones can also be found by sequence similarity using our online BLAST Tool.

The same search tools give you access to millions of ESTs, full-length cDNAs (including the Mammalian Gene Collection and Incyte Collections), cDNA clones for model organisms, shRNA plasmid constructs, and more.

## ORDERING INFORMATION

CATALOG NO.	DESCRIPTION
OHS1770	Human ORF Clone
OHS1771	Human ORF Collection
Clones are provided as a live culture in 2-ml tubes or in 96-well plates.	

Go to [www.openbiosystems.com](http://www.openbiosystems.com) to place an order or call: 1-888-412-2225 to speak with a representative.

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>> ORF-ONLY CLONES DERIVED FROM THE MGC



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