

## Product datasheet for **RC214178L4V**

### ORP150 (HYOU1) (NM\_006389) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	ORP150 (HYOU1) (NM_006389) Human Tagged ORF Clone Lentiviral Particle
Symbol:	HYOU1
Synonyms:	GRP-170; Grp170; HSP12A; IMD59; ORP-150; ORP150
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_006389
ORF Size:	2997 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC214178).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_006389.2</a> , <a href="#">NP_006380.1</a>
RefSeq Size:	4552 bp
RefSeq ORF:	3000 bp
Locus ID:	10525
UniProt ID:	<a href="#">Q9Y4L1</a>
Cytogenetics:	11q23.3
Domains:	HSP70
Protein Families:	Transmembrane



[View online »](#)

MW: 111.34 kDa

**Gene Summary:** The protein encoded by this gene belongs to the heat shock protein 70 family. This gene uses alternative transcription start sites. A cis-acting segment found in the 5' UTR is involved in stress-dependent induction, resulting in the accumulation of this protein in the endoplasmic reticulum (ER) under hypoxic conditions. The protein encoded by this gene is thought to play an important role in protein folding and secretion in the ER. Since suppression of the protein is associated with accelerated apoptosis, it is also suggested to have an important cytoprotective role in hypoxia-induced cellular perturbation. This protein has been shown to be up-regulated in tumors, especially in breast tumors, and thus it is associated with tumor invasiveness. This gene also has an alternative translation initiation site, resulting in a protein that lacks the N-terminal signal peptide. This signal peptide-lacking protein, which is only 3 amino acids shorter than the mature protein in the ER, is thought to have a housekeeping function in the cytosol. In rat, this protein localizes to both the ER by a carboxy-terminal peptide sequence and to mitochondria by an amino-terminal targeting signal. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]