Construct information sheet

1. Gene name	**OPRS1/ SIGMAR1**
2. Uniprot ID	Q99720
3. Region	G31 – P223

4. Description	Sigma non-opioid intracellular receptor 1
5. Synonyms	ALS16; DSMA2; OPRS1; SIG-1R; SR-BP; SR-BP1; SRBP; hSigmaR1; sigma1R
6. Construct ID	OPRS1A-c210
7. Protein sequence	*MHHHHHHSSGVDLGTENLYFQ*SM*GTQSFVFQREEIAQLARQYAGLDHEL AFSRLIVELRRLHPGHVLPDEELQWVFVNAGGWMGAMCLLHASLSEYVLL FGTALGSRGHSGRYWAEISDTIISGTFHQWREGTTKSEVFYPGETVVHGP GEATAVEWGPNTWMVEYGRGVIPSTLAFALADTVFSTQDFLTLFYTLRSY ARGLRLELTTYLFGQDPS*SKGGYGLNDIFEAQ**K***IEWHE*
8. DNA sequence (coding sequence)	ATGCACCATCATCATCATCATTCTTCTGGTGTAGATCTGGGTACCGAGAA CCTGTACTTCCAATCCATGGGTACGCAGAGCTTCGTCTTCCAGCGCGAAG AGATAGCGCAGTTGGCGCGGCAGTACGCTGGGCTGGACCACGAGCTGGCC TTCTCTCGTCTGATCGTGGAGCTGCGGCGGCTGCACCCAGGCCACGTGCT GCCCGACGAGGAGCTGCAGTGGGTGTTCGTGAATGCGGGTGGCTGGATGG GCGCCATGTGCCTTCTGCACGCCTCGCTGTCCGAGTATGTGCTGCTCTTC GGCACCGCCTTGGGCTCCCGCGGCCACTCGGGGCGCTACTGGGCTGAGAT CTCGGATACCATCATCTCTGGCACCTTCCACCAGTGGAGAGAGGGCACCA CCAAAAGTGAGGTCTTCTACCCAGGGGAGACGGTAGTACACGGGCCTGGT GAGGCAACAGCTGTGGAGTGGGGGCCAAACACATGGATGGTGGAGTACGG CCGGGGCGTCATCCCATCCACCCTGGCCTTCGCGCTGGCCGACACTGTCT TCAGCACCCAGGACTTCCTCACCCTCTTCTATACTCTTCGCTCCTATGCT CGGGGCCTCCGGCTTGAGCTCACCACCTACCTCTTTGGCCAGGACCCTAG CAGTAAAGGTGGATACGGCCTGAATGATATCTTTGAAGCGCAGAAGATTG AATGGCATGAATGA
9. Construct accession	XXXXXX
Construct provider	Addgene clone XXXXXX

Vector information:

10. pNIC-Bio3	
Antibiotic resistance	Kanamycin, 50 μg/ml
Promoter	T7 - lacO
N-terminal fusion – seq.	MHHHHHHSSGVDLGTENLYFQ*SM (* - TEV cleavage site)
N-terminal fusion – MW	2684.1 Da including Met (2465.8 Da removed by TEV cleavage)
C-terminal fusion – seq.	GSKGGYGLNDIFEAQ**K***IEWHE (* biotinylation site)
C-terminal fusion - MW	2396.57 Da, +226 Da for biotinylation
Protease cleavage	TEV protease
Preferred expression host	DE3 hosts: BL21, Rosetta, etc. MUST express T7 RNA polymerase. For effective biotinylation, the host should overexpress BirA (e.g. from plasmid pCDF-BIRA, GenBank: JF914075)
Genebank: JN792439	Reference: PMID: 22027370

Opher Gileadi, Structural Genomics Consortium
opher.gileadi@sgc.ox.ac.uk