

Table S3. Oligonucleotides utilized in gene construction. Restriction sites are underlined.

Name	Sequence
1: imFGFR1_inverse_R	TGAG <u>ACCGGT</u> CTCGACGCGCCGTTTGAG
2: imFGFR1_inverse1_F	CAAG <u>ACCGGT</u> GGATCCGGAGTCGACTATC
3: imFGFR1_inverse2_F	CAAG <u>ACCGGT</u> AAACTGGAAGTCGAGGGAGTGC
4: FKBP_AgeI_F	GATC <u>ACCGGT</u> AAACTGGAAGTCGAGGGAGTGC
5: FKBP_XmaI_R	GATC <u>CCCGGG</u> ACCGCCAGATTCCAGTTTTAGAAG
6: AtPH1-LOV2_AgeI_F	GATC <u>ACCGGT</u> GAAAGCGTTGATGATAAGGTCAGACAG AAGG
7: AtPH1-LOV2_XmaI_R	GATC <u>CCCGGG</u> CCGCACGGGCTCAACGTGCT
8: AtPH2-LOV2_AgeI_F	GATC <u>ACCGGT</u> GATTCTTGGGATCTGAGTGATAGGGAAA GG
9: AtPH2-LOV2_XmaI_R	GATC <u>CCCGGG</u> GCTGGAGTGGCTCGACATGATCTGAC
10: CrPH1-LOV1_AgeI_F	GATC <u>ACCGGT</u> GCAGGACTCAGACATACATTTGTGGTG G
11: CrPH1-LOV1_XmaI_R	GATC <u>CCCGGG</u> GGCCAGGGCTTTCCTTCAGTC
12: NcVV-LOV_XmaI_F	GATC <u>CCCGGG</u> CACACTCTCTACGCCCCAGGCG
13: NcVV-LOV_XmaI_R	GATC <u>CCCGGG</u> TTCGGTTTCGCACTGAAAACCCATGCT
14: VfAU1-LOV_AgeI_F	GATC <u>ACCGGT</u> CCTGACTACAGTCTCGTGAAGG
15: VfAU1-LOV_XmaI_R	GATC <u>CCCGGG</u> CCTTCTGCGCAGCATGTTACTGG
16: Opto-mFGFR1 _YY271/2FF_F	GAGACATTCATCATATCGACTTCTTCAAGAAAACCACCA ACGGCC
17: Opto-mFGFR1 _YY271/2FF_R	GGCCGTTGGTGGTTTTCTTGAAGAAGTCGATATGATGA ATGTCTC
18: Opto-mFGFR1 _R195E_F	TACAGGCCCGGGAGCCTCCTGGGCTGGAGTACTGCTA TAA
19: Opto-mFGFR1 _R195E_R	TTATAGCAGTACTCCAGCCCAGGAGGCTCCCGGGCCT GTA
20: Opto-mFGFR1 _I472V_F	CTCCCAGACAACCCTGTCGTCTACGCCAGTAG
21: Opto-mFGFR1 _I472V_R	CTACTGGCGTAGACGACAGGGTTGTCTGGGAG
22: Opto-mFGFR1 _Y81F_F	CTGGCTGGAGTCTCCGAATTTGAGCTCCCT
23: Opto-mFGFR1	AGGGAGCTCAAATTCGGAGACTCCAGCCAG

_Y81F_R	
24: Opto-mFGFR1 _Y201F_F	CTCCTGGGCTGGAGTTCTGCTATAACCCCAG
25: Opto-mFGFR1 _Y201F_R	CTGGGGTTATAGCAGA ACTCCAGCCCAGGAG
26: Opto-mFGFR1 _Y203F_F	TTGTGGCTGGGGTTAAAGCAGTACTCCAGCC
27: Opto-mFGFR1 _Y203F_R	GGCTGGAGTACTGCTTTAACCCCAGCCACAA
28: Opto-mFGFR1 _Y348F_F	CTGTACCAATGAGCTGTTTCATGATGATGCGGGACT
29: Opto-mFGFR1 _Y348F_R	AGTCCCGCATCATCATGAACAGCTCATTGGTACAG
30: Opto-mFGFR1 _Y384F_F	CCTTGACCTCCAACCAGGAGTTTCTGGACCTGT
31: Opto-mFGFR1 _Y384F_R	ACAGGTCCAGAACTCCTGGTTGGAGGTCAAGG
32: Opto-mFGFR1 _Y447S_F	GAGACCGGTCCTGACAGCAGTCTCGTGAAGGC
33: Opto-mFGFR1 _Y447S_R	GCCTTCACGAGACTGCTGTCAGGACCGGTCTC
34: Opto-mFGFR1 _4A_ClaI_F	ATGC <u>ATCGAT</u> CGCAGCACGCGCACAGGTAACAGTGTC AGCTGAC
35: Opto-mFGFR1 _4A_ClaI_R	TGCG <u>ATCGAT</u> GCGGCCAGCTTGTGCACAGC
36: MYR_inverse_R	GATC <u>CACCGGT</u> GACGTCGAGGCGCTGGCTGG
37: VfAU1-LOV_inverse_F	GATC <u>CACCGGT</u> GGACCTGACTACAGTCTCGTGAAG
38: hEGFR_ICD_AgeI_AscI_F	GATC <u>CACCGGTGGCGCGCC</u> CGAAGGCGCCACATCGTTC
39: hEGFR_ICD_BspEI_R	GATC <u>TCCGGAT</u> GCTCCAATAAATTCAGTCTTTG
40: hRET_ICD_AgeI_F	GATC <u>CACCGGT</u> CACTGCTACCACAAGTTTGCC
41: hRET_ICD_AgeI_R	GATC <u>CACCGGT</u> GAATCTAGTAAATGCATG
42: LNGFR_ECD_NotI_F	GATC <u>GCGGCCG</u> CACCATGGGGGCAGGTGCCACC
43: LNGFR_ECD_AscI_R	GATC <u>GCGGCCG</u> CCCCTCTTGAAGGCTATGTAGGCC
44: VfAU1-LOV_BglII_F	CTTT <u>AGATCT</u> CCTGACTACAGTCTCGTGAAGG

45: VfAU1-LOV_EcoRI_R	CTTTGAATTCCTTTCTGCGCAGCATGTTACTG
46: FRS2_NheI_F	TAGCGCTAGCATGGGTAGCTGTTGTAGCTGTCC
47: FRS2_NheI_R	TAGCGCTAGCTTTCCAGGCTAACATGGGCAGATC
48: PLC γ 1_AgeI_F	TAGCACCGGTGCGGGCGCCGCGTCCC
49: PLC γ 1_AgeI_R	TAGCACCGGTCCGAGTCCTTCTTGGGGC
50: h/mFGFR1_F	GGTGTGCCTGTGGAGGA ACTT
51: h/mFGFR1_R	CCAGCAGTCCCGCATCATCAT
52: GAPDH_F	CTGGCGTCTTCACCACCAT
53: GAPDH_R	GCCTGCTTCACCACCTTCT
54: VfAU1-LOV_BamHI_F	GATCGGATCCCCTGACTACAGTCTCGTG
55: VfAU1-LOV_KpnI_R	GATCGGTACCTTACTTTCTGCGCAGCATGTTAC