

Supplementary Table 1 – Sequences of primers used for RT-PCR amplification and subcloning of the rP2X7 DNA

Construct number	Construct name	Primer number	Orientation	Primer sequence
K-0887	rP2X7	O-0551	forward	5' AAAG <u>GACGTC</u> GAGCCTGTCGCCATGCCCCGCTTGCTGTAGCTGGAA
K-0887	rP2X7	O-0552	reverse	5' AAAT <u>TCTAGA</u> TAGTCAGTAGGGATACTTGAAGCCACTGTACTGCC

Construct and primer numbers refer to lab-internal documentation lists and are shown for eventual tracking purposes. AatII (GACGTC) and XbaI (TCTAGA) restriction sites used for directional cloning into the pNKS2 vector are bolded and underlined.

Supplementary Table 2 – Sequences of primers used for in-frame ligation of the GFP coding sequence into the hGLYRA1 DNA 3' of the signal peptide

Construct number	Final construct name	Primer number	Orientation	Primer sequence
K-1555	SP ^{mut} -hGLYRA1-His	O-1699	forward	5' GAGGCTGAAGCTGCT <u>CATATG</u> GATATCA <u>AGCGCT</u> CCGCACCCAAG
K-1555	SP ^{mut} -hGLYRA1-His	O-1700	reverse	5' CTTGGGTGCGG <u>AGCGCT</u> TGATATC <u>CATATG</u> AGCAGCTTCAGCCTC
K-1556	SP-GFP-hGLYRA1-His	O-1701	forward	5' AAAAA <u>CATATG</u> GTGAGCAAGGGCGAGGAG
K-1556	SP-GFP-hGLYRA1-His	O-1702	reverse	5' AAAAA <u>AGCGCT</u> TGTACAGCTCGTCCATGCCGA

Construct and primer numbers refer to lab-internal documentation lists and are shown for eventual tracking purposes. NdeI (CATATG) and Eco47III (AGCGCT) restriction sites (bolded and underlined) were first inserted by QuikChange mutagenesis and then used for the directional subcloning of the PCR-amplified GFP coding sequence.

Supplementary Table 3 – Sequences of megaprimers used in this study

Construct number	Final construct name	Primer number	Orientation	Megaprimer sequence
K-6530	hP2X4-GFP	O-7149	forward	5' GCAGGGTCTTGCTAGTGAGCTGGACCAG GTGAGCAAGGGCGAGGAG
K-6530	hP2X4-GFP	O-7150	reverse	5' GGCGCGCCCGGAATTCCTCA CTTGTACAGCTCGTCCATGCC
K-6531	hP2X4-RFP	O-7697	forward	5' GCAGGGTCTTGCTAGTGAGCTGGACCAG ATGGTGTCTAAGGGCGAAGAGC
K-6531	hP2X4-RFP	O-7618	reverse	5' GGCGCGCCCGGAATTCCTCA ATTAAGTTTGTGCCCCAGTTTGC
K-6926	hP2X4-GFP-RFP	O-9216	forward	5' GATCACTCTCGGCATGGACGAGCTGTACAAGATGGTGTCTAAGGGCGAAGAGC
K-6926	hP2X4-GFP-RFP	O-9278	reverse	5' CCTCGATGTTGTGGCGATCTTGAAGTTCA ATTAAGTTTGTGCCCCAGTTTGC
K-6776	¹²² GFP-hP2X4	O-9083	forward	5' CCTGTGCCCCGAGATTCCAGATGCG GTGAGCAAGGGCGAGGAGC
K-6776	¹²² GFP-hP2X4	O-9082	reverse	5' GCAGTACAGCTGGCATCTGATTTACACACAGTGGT CTTGTACAGCTCGTCCATGCC
K-6925	¹²² RFP-hP2X4	O-9276	forward	5' CCTGTGCCCCGAGATTCCAGATGCG ATGGTGTCTAAGGGCGAAGAGC
K-6925	¹²² RFP-hP2X4	O-9277	reverse	5' GCAGTACAGCTGGCATCTGATTTACACACAGTGGT ATTAAGTTTGTGCCCCAGTTTGC
K-7080	rP2X4-GFP	O-9464	forward	5' GCAGGGTCTTTTCGGGGGAGATGAACCAG ATGGTGAGCAAGGGCGAGG
K-7080	rP2X4-GFP	O-9465	reverse	5' GCGCCCGGAATTCTAGAGGCGTCA CTTGTACAGCTCGTCCATGCC
K-7081	rP2X4-RFP	O-9466	forward	5' GCAGGGTCTTTTCGGGGGAGATGAACCAG ATGGTGTCTAAGGGCGAAGAGC
K-7081	rP2X4-RFP	O-9467	reverse	5' GCGCCCGGAATTCTAGAGGCGTCA ATTAAGTTTGTGCCCCAGTTTGC
K-7079	¹²² RFP-rP2X4	O-9462	forward	5' CAGACACAGAGCACCTGTCCAGAGATTCCCTGATAAG ATGGTGTCTAAGGGCGAAGAGC
K-7079	¹²² RFP-rP2X4	O-9463	reverse	5' GTGCAGTCGGCGTCTGAATTACAAATGCTGGT ATTAAGTTTGTGCCCCAGTTTGC
K-7183	^{122.GAGA} GFP ^{AGAG} -rP2X4	O-9578	forward	5' CTGTCCAGAGATTCTGATAAGGGAGCTGGAGCT ATGGTGAGCAAGGGCGAGG
K-7183	^{122.GAGA} GFP ^{AGAG} -rP2X4	O-9579	reverse	5' GTCTGAATTACAAATGCTGGT TCCAGCTCCAGCCTTGTACAGCTCGTCCATGCC
K-7081	^{122.GAGA} RFP ^{AGAG} -rP2X4	O-9470	forward	5' CTGTCCAGAGATTCTGATAAGGGAGCTGGAGCT ATGGTGTCTAAGGGCGAAGAGC
K-7081	^{122.GAGA} RFP ^{AGAG} -rP2X4	O-9471	reverse	5' GTCTGAATTACAAATGCTGGT TCCAGCTCCAGCCTTAAGTTTGTGCCCCAGTTTGC
K-6893	hP2X7-GFP	O-9214	forward	5' GTGAAGGGCAGTACAGTGGCTTCAAGAGTCTTAC ATGGTGAGCAAGGGCGAGG
K-6893	hP2X7-GFP	O-9215	reverse	5' CCGGGATCCTCTAGAGCCTGGCTTCA CTTGTACAGCTCGTCCATGCC
K-6892	hP2X7-RFP	O-9212	forward	5' GAAGGGCAGTACAGTGGCTTCAAGAGTCTTAC ATGGTGTCTAAGGGCGAAGAGC
K-6892	hP2X7-RFP	O-9213	reverse	5' CGGGATCCTCTAGAGCCTGGCTTCA ATTAAGTTTGTGCCCCAGTTTGC
K-6894	hP2X7-GFP-RFP	O-9216	forward	5' GATCACTCTCGGCATGGACGAGCTGTACAAGATGGTGTCTAAGGGCGAAGAGC

K-6894	hP2X7-GFP-RFP	O-9217	reverse	5' CCGGGGATCCTCTAGAGCCTGGCTTCA ATTAAGTTTGTGCCCCAGTTGC
K-6885	hP2X7 ¹⁻⁴⁰⁸ -GFP	O-9203	forward	5' CATTAAAGTACGTGTCCTTTGTGGATGAATCCCAC ATGGTGAGCAAGGGCGAGG
K-6885	hP2X7 ¹⁻⁴⁰⁸ -GFP	O-9204	reverse	5' CGGTACGTACCCGGGGATCCTCTAGACTCA CTTGACAGCTCGTCCATGCC
K-6906	hP2X7 ¹⁻⁴⁰⁸ -RFP	O-9238	forward	5' CATTAAAGTACGTGTCCTTTGTGGATGAATCCCAC ATGGTGTCTAAGGGCGAAGAGC
K-6906	hP2X7 ¹⁻⁴⁰⁸ -RFP	O-9239	reverse	5' CGGTACGTACCCGGGGATCCTCTAGACTCA ATTAAGTTTGTGCCCCAGTTGC
K-6945	rP2X7-GFP	O-9281	forward	5' CAGGGGCAGTACTCTGGCTTCAAGTATCCCTAC ATGGTGAGCAAGGGCGAGG
K-6945	rP2X7-GFP	O-9282	reverse	5' CGGTACGTACCCGGGGATCCTCTAGATAGTCA CTTGACAGCTCGTCCATGCCG
K-6946	rP2X7-RFP	O-9283	forward	5' CAGGGGCAGTACTCTGGCTTCAAGTATCCCTAC ATGGTGTCTAAGGGCGAAGAGC
K-6946	rP2X7-RFP	O-9284	reverse	5' CGGTACGTACCCGGGGATCCTCTAGATAGTCA ATTAAGTTTGTGCCCCAGTTGC
K-7016	^{122.GAGA} GFP ^{AGAG} -rP2X7	O-9370	forward	5' GAGTATCCCAGCCG GGAGCTGGAGCTATGGTGAGCAAGGGCGAGG
K-7016	^{122.GAGA} GFP ^{AGAG} -rP2X7	O-9371	reverse	5' CAGAATGGCACTGTTTACCT CCAGCTCCAGCCTTGACAGCTCGTCCATGCC
K-5710	GluCl-GFP	O-7724	forward	5' GGACATCACCACCATCACCATCACCAT ATGGTGAGCAAGGGCGAG
K-5710	GluCl-GFP	O-7723	reverse	5' CACCACTTTGTACAAGAAAGCTGGGTTCA CTTGACAGCTCGTCCATGCC
K-7181	hTrpV2-GFP	O-9574	forward	5' GTGCCCCTCCAGCTCCTCCAGTCCAAC ATGGTGAGCAAGGGCGAGG
K-7181	hTrpV2-GFP	O-9575	reverse	5' CGATATCACCACCTTTGTACAAGAAAGCTGGGTCTCTCA CTTGACAGCTCGTCCATGCC

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