**Investigator:** Pontus Nordenfelt

**Sample ID\***: aL-L3, aL-sGFP\_dN5C1

**Bacterial Strain­**: DH5α

**Vector:** pcDNA3.1/hygro(-); 5.6 kb

**Antibiotics**: Ampicillin, Hygromycin

XbaI

NotI

|  |
| --- |
| **Insert**: full-length human aL with moxsynGFP in betapropeller |

between XbaI and NotI; 4200 bp

**Tags**: **tension sensor module**

**Linker in orange**

**Insert nucleotide sequence**:

TCTAGAGCCACCATGAAGGATTCCTGCATCACTGTGATGGCCATGGCGCTGCTGTCTGGGTTCTTTTTCTTCGCGCCGGCCTCGAGCTACAACCTGGACGTGCGGGGCGCGCGGAGCTTCTCCCCACCGCGCGCCGGGAGGCACTTTGGATACCGCGTCCTGCAGGTCGGAAACGGGGTCATCGTGGGAGCTCCAGGGGAGGGGAACAGCACAGGAAGCCTCTATCAGTGCCAGTCGGGCACAGGACACTGCCTGCCAGTCACCCTGAGAGGTTCCAACTATACCTCCAAGTACTTGGGAATGACCTTGGCAACAGACCCCACAGATGGAAGCATTTTGGCCTGTGACCCTGGGCTGTCTCGAACGTGTGACCAGAACACCTATCTGAGTGGCCTGTGTTACCTCTTCCGCCAGAATCTGCAGGGTCCCATGCTGCAGGGGCGCCCTGGTTTTCAGGAATGTATCAAGGGCAACGTAGACCTGGTATTTCTGTTTGATGGTTCGATGAGCTTGCAGCCAGATGAATTTCAGAAAATTCTGGACTTCATGAAGGATGTGATGAAGAAACTCAGCAACACTTCGTACCAGTTTGCTGCTGTTCAGTTTTCCACAAGCTACAAAACAGAATTTGATTTCTCAGATTATGTTAAACGGAAGGACCCTGATGCTCTGCTGAAGCATGTAAAGCACATGTTGCTGTTGACCAATACCTTTGGTGCCATCAATTATGTCGCGACAGAGGTGTTCCGGGAGGAGCTGGGGGCCCGGCCAGATGCCACCAAAGTGCTTATCATCATCACGGATGGGGAGGCCACTGACAGTGGCAACATCGATGCGGCCAAAGACATCATCCGCTACATCATCGGGATTGGAAAGCATTTTCAGACCAAGGAGAGTCAGGAGACCCTCCACAAATTTGCATCAAAACCCGCGAGCGAGTTTGTGAAAATTCTGGACACATTTGAGAAGCTGAAAGATCTATTCACTGAGCTGCAGAAGAAGATCTATGTCATTGAGGGCACAAGCAAACAGGACCTGACTTCCTTCAACATGGAGCTGTCCTCCAGCGGCATCAGTGCTGACCTCAGCAGGGGCCATGCAGTCGTGGGGGCAGTAGGAGCCAAGGACTGGGCTGGGGGCTTTCTTGACCTGAAGGCAGACCTGCAGGATGACACATTTATTGGGAATGAACCATTGACACCAGAAGTGAGAGCAGGCTATTTGGGTTACACCGTGACCTGGCTGCCCTCCCGGCAAAAGACTTCGTTGCTGGCCTCGGGAGCCCCTCGATACCAGCACATGGGCCGAGTGCTGCTGTTCCAAGAGCCACAGGCTGAGGAACTGTTTACTGGAGTGGTCCCTATTCTGGTGGAGCTGGATGGAGATGTCAACGGGCACAAGTTTAGCGTGCGAGGAGAGGGAGAAGGAGACGCTACCAATGGGAAGCTGACACTGAAATTCATCAGCACCACAGGAAAGCTGCCCGTGCCTTGGCCAACTCTGGTCACTACCCTGACCTACGGCGTGCAGAGCTTTTCCCGGTATCCAGACCACATGAAGAGACATGATTTCTTTAAAAGCGCAATGCCCGAGGGATACGTCCAGGAAAGGACCATTTCCTTCAAGGACGATGGCACATATAAAACTCGCGCCGAGGTGAAGTTTGAAGGCGACACACTGGTCAACCGAATCGAGCTGAAGGGGATTGACTTCAAAGAAGATGGAAATATCCTGGGCCACAAACTGGAGTACAACTTCAACTCTCATAACGTCTACATCACCGCCGATAAGCAGAAAAACGGGATCAAGGCTAACTTCAAGATCAGACACAACGTGGAAGACGGCAGCGTCCAGCTGGCCGATCATTACCAGCAGAACACACCTATCGGCGACGGGCCCGTGCTGCTGCCTGATAATCACTATCTGTCTACTCAGAGTAAGCTGTCAAAAGACCCCAACGAGAAGCGGGATCATATGGTCCTGCTGGAGTTCGTCACCGCTGCTGGAATCACCCACGGAATGGATGAGCTGTATGCTCAACACTGGAGCCAGGTCCAGACAATCCATGGGACCCAGATTGGCTCTTATTTCGGTGGGGAGCTGTGTGGCGTCGACGTGGACCAAGATGGGGAGACAGAGCTGCTGCTGATTGGTGCCCCACTGTTCTATGGGGAGCAGAGAGGAGGCCGGGTGTTTATCTACCAGAGAAGACAGTTGGGGTTTGAAGAAGTCTCAGAGCTGCAGGGGGACCCCGGCTACCCACTCGGGCGGTTTGGAGAAGCCATCACTGCTCTGACAGACATCAACGGCGATGGGCTGGTAGACGTGGCTGTGGGGGCCCCTCTGGAGGAGCAGGGGGCTGTGTACATCTTCAATGGGAGGCACGGGGGGCTTAGTCCCCAGCCAAGTCAGCGGATAGAAGGGACCCAAGTGCTCTCAGGAATTCAGTGGTTTGGACGCTCCATCCATGGGGTGAAGGACCTTGAAGGGGATGGCTTGGCAGATGTGGCTGTGGGGGCTGAGAGCCAGATGATCGTGCTGAGCTCCCGGCCCGTGGTGGATATGGTCACCCTGATGTCCTTCTCTCCAGCTGAGATCCCAGTGCATGAAGTGGAGTGCTCCTATTCAACCAGTAACAAGATGAAAGAAGGAGTTAATATCACAATCTGTTTCCAGATCAAGTCTCTCATCCCCCAGTTCCAAGGCCGCCTGGTTGCCAATCTCACTTACACTCTGCAGCTGGATGGCCACCGGACCAGAAGACGGGGGTTGTTCCCAGGAGGGAGACATGAACTCAGAAGGAATATAGCTGTCACCACCAGCATGTCATGCACTGACTTCTCATTTCATTTCCCGGTATGTGTTCAAGACCTCATCTCCCCCATCAATGTTTCCCTGAATTTCTCTCTTTGGGAGGAGGAAGGGACACCGAGGGACCAAAGGGCGCAGGGCAAGGACATACCGCCCATCCTGAGACCCTCCCTGCACTCGGAAACCTGGGAGATCCCTTTTGAGAAGAACTGTGGGGAGGACAAGAAGTGTGAGGCAAACTTGAGAGTGTCCTTCTCTCCTGCAAGATCCAGAGCCCTGCGTCTAACTGCTTTTGCCAGCCTCTCTGTGGAGCTGAGCCTGAGTAACTTGGAAGAAGATGCTTACTGGGTCCAGCTGGACCTGCACTTCCCCCCGGGACTCTCCTTCCGCAAGGTGGAGATGCTGAAGCCCCATAGCCAGATACCTGTGAGCTGCGAGGAGCTTCCTGAAGAGTCCAGGCTTCTGTCCAGGGCATTATCTTGCAATGTGAGCTCTCCCATCTTCAAAGCAGGCCACTCGGTTGCTCTGCAGATGATGTTTAATACACTGGTAAACAGCTCCTGGGGGGACTCGGTTGAATTGCACGCCAATGTGACCTGTAACAATGAGGACTCAGACCTCCTGGAGGACAACTCAGCCACTACCATCATCCCCATCCTGTACCCCATCAACATCCTCATCCAGGACCAAGAAGACTCCACACTCTATGTCAGTTTCACCCCCAAAGGCCCCAAGATCCACCAAGTCAAGCACATGTACCAGGTGAGGATCCAGCCTTCCATCCACGACCACAACATACCCACCCTGGAGGCTGTGGTTGGGGTGCCACAGCCTCCCAGCGAGGGGCCCATCACACACCAGTGGAGCGTGCAGATGGAGCCTCCCGTGCCCTGCCACTATGAGGATCTGGAGAGGCTCCCGGATGCAGCTGAGCCTTGTCTCCCCGGAGCCCTGTTCCGCTGCCCTGTTGTCTTCAGGCAGGAGATCCTCGTCCAAGTGATCGGGACTCTGGAGCTGGTGGGAGAGATCGAGGCCTCTTCCATGTTCAGCCTCTGCAGCTCCCTCTCCATCTCCTTCAACAGCAGCAAGCATTTCCACCTCTATGGCAGCAACGCCTCCCTGGCCCAGGTTGTCATGAAGGTTGACGTGGTGTATGAGAAGCAGATGCTCTACCTCTACGTGCTGAGCGGCATCGGGGGGCTGCTGCTGCTGCTGCTCATTTTCATAGTGCTGTACAAGGTTGGTTTCTTCAAACGGAACCTGAAGGAGAAGATGGAGGCTGGCAGAGGTGTCCCGAATGGAATCCCTGCAGAAGACTCTGAGCAGCTGGCATCTGGGCAAGAGGCTGGGGATCCCGGCTGCCTGAAGCCCCTCCATGAGAAGGACTCTGAGAGTGGTGGTGGCAAGGACTGAGCGGCC

**Insert amino acid sequence** **(include tags):**

RATMKDSCITVMAMALLSGFFFFAPASSYNLDVRGARSFSPPRAGRHFGYRVLQVGNGVIVGAPGEGNSTGSLYQCQSGTGHCLPVTLRGSNYTSKYLGMTLATDPTDGSILACDPGLSRTCDQNTYLSGLCYLFRQNLQGPMLQGRPGFQECIKGNVDLVFLFDGSMSLQPDEFQKILDFMKDVMKKLSNTSYQFAAVQFSTSYKTEFDFSDYVKRKDPDALLKHVKHMLLLTNTFGAINYVATEVFREELGARPDATKVLIIITDGEATDSGNIDAAKDIIRYIIGIGKHFQTKESQETLHKFASKPASEFVKILDTFEKLKDLFTELQKKIYVIEGTSKQDLTSFNMELSSSGISADLSRGHAVVGAVGAKDWAGGFLDLKADLQDDTFIGNEPLTPEVRAGYLGYTVTWLPSRQKTSLLASGAPRYQHMGRVLLFQEPQ**AEELFTGVVPILVELDGDVNGHKFSVRGEGEGDATNGKLTLKFISTTGKLPVPWPTLVTTLTYGVQSFSRYPDHMKRHDFFKSAMPEGYVQERTISFKDDGTYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNFNSHNVYITADKQKNGIKANFKIRHNVEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSKLSKDPNEKRDHMVLLEFVTAAGITHGMDELYAQ**HWSQVQTIHGTQIGSYFGGELCGVDVDQDGETELLLIGAPLFYGEQRGGRVFIYQRRQLGFEEVSELQGDPGYPLGRFGEAITALTDINGDGLVDVAVGAPLEEQGAVYIFNGRHGGLSPQPSQRIEGTQVLSGIQWFGRSIHGVKDLEGDGLADVAVGAESQMIVLSSRPVVDMVTLMSFSPAEIPVHEVECSYSTSNKMKEGVNITICFQIKSLIPQFQGRLVANLTYTLQLDGHRTRRRGLFPGGRHELRRNIAVTTSMSCTDFSFHFPVCVQDLISPINVSLNFSLWEEEGTPRDQRAQGKDIPPILRPSLHSETWEIPFEKNCGEDKKCEANLRVSFSPARSRALRLTAFASLSVELSLSNLEEDAYWVQLDLHFPPGLSFRKVEMLKPHSQIPVSCEELPEESRLLSRALSCNVSSPIFKAGHSVALQMMFNTLVNSSWGDSVELHANVTCNNEDSDLLEDNSATTIIPILYPINILIQDQEDSTLYVSFTPKGPKIHQVKHMYQVRIQPSIHDHNIPTLEAVVGVPQPPSEGPITHQWSVQMEPPVPCHYEDLERLPDAAEPCLPGALFRCPVVFRQEILVQVIGTLELVGEIEASSMFSLCSSLSISFNSSKHFHLYGSNASLAQVVMKVDVVYEKQMLYLYVLSGIGGLLLLLLIFIVLYKVGFFKRNLKEKMEAGRGVPNGIPAEDSEQLASGQEAGDPGCLKPLHEKDSESGGGKD\*