**Investigator:** Pontus Nordenfelt

**Sample ID\***: b2-TS5

**Bacterial Strain­**: DH5α

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

**Antibiotics**: Ampicillin, Hygromycin

NheI

HindIII

|  |
| --- |
| **Insert**: full-length human b2 with tension sensor at b2\_749; QAQA-tension sensor AQAQKEKL |

between NheI and HindIII; 4212 bp

**Tags**: tension sensor module

**Insert nucleotide sequence**:

gctagcgccaccATGCTGGGCCTGCGCCCCCCACTGCTCGCCCTGGTGGGGCTGCTCTCCCTCGGGTGCGTCCTCTCTcaggagtgcacgaagttcaaggtcagcagctgccgggaatgcatcgagtcggggcccggctgcacctggtgccagaagctgaacttcacagggccgggggatcctgactccattcgctgcgacacccggccacagctgctcatgaggggctgtgcggctgacgacatcatggaccccacaagcctcgctgaaacccaggaagaccacaatgggggccagaagcagctgtccccacaaaaagtgacgctttacctgcgaccaggccaggcagcagcgttcaacgtgaccttccggcgggccaagggctaccccatcgacctgtactatctgatggacctctcctactccatgcttgatgacctcaggaatgtcaagaagctaggtggcgacctgctccgggccctcaacgagatcaccgagtccggccgcattggcttcgggtccttcgtggacaagaccgtgctgccgttcgtgaacacgcaccctgataagctgcgaaacccatgccccaacaaggagaaagagtgccagcccccgtttgccttcaggcacgtgctgaagctgaccaacaactccaaccagtttcagaccgaggtcgggaagcagctgatttccggaaacctggatgcacccgagggtgggctggacgccatgatgcaggtcgccgcctgcccggaggaaatcggctggcgcaacgtcacgcggctgctggtgtttgccactgatgacggcttccatttcgcgggcgacggaaagctgggcgccatcctgacccccaacgacggccgctgtcacctggaggacaacttgtacaagaggagcaacgaattcgactacccatcggtgggccagctggcgcacaagctggctgaaaacaacatccagcccatcttcgcggtgaccagtaggatggtgaagacctacgagaaactcaccgagatcatccccaagtcagccgtgggggagctgtctgaggactccagcaatgtggtccatctcattaagaatgcttacaataaactctcctccagggtcttcctggatcacaacgccctccccgacaccctgaaagtcacctacgactccttctgcagcaatggagtgacgcacaggaaccagcccagaggtgactgtgatggcgtgcagatcaatgtcccgatcaccttccaggtgaaggtcacggccacagagtgcatccaggagcagtcgtttgtcatccgggcgctgggcttcacggacatagtgaccgtgcaggttcttccccagtgtgagtgccggtgccgggaccagagcagagaccgcagcctctgccatggcaagggcttcttggagtgcggcatctgcaggtgtgacactggctacattgggaaaaactgtgagtgccagacacagggccggagcagccaggagctggaaggaagctgccggaaggacaacaactccatcatctgctcagggctgggggactgtgtctgcgggcagtgcctgtgccacaccagcgacgtccccggcaagctgatatacgggcagtactgcgagtgtgacaccatcaactgtgagcgctacaacggccaggtctgcggcggcccggggagggggctctgcttctgcgggaagtgccgctgccacccgggctttgagggctcagcgtgccagtgcgagaggaccactgagggctgcctgaacccgcggcgtgttgagtgtagtggtcgtggccggtgccgctgcaacgtatgcgagtgccattcaggctaccagctgcctctgtgccaggagtgccccggctgcccctcaccctgtggcaagtacatctcctgcgccgagtgcctgaagttcgaaaagggcccctttgggaagaactgcagcgcggcgtgtccgggcctgcagctgtcgaacaaccccgtgaagggcaggacctgcaaggagagggactcagagggctgctgggtggcctacacgctggagcagcaggacgggatggaccgctacctcatctatgtggatgagagccgagagtgtgtggcaggccccaacatcgccgccatcgtcgggggcaccgtggcaggcatcgtgctgatcggcattctcctgctggtcatctggaaggctctgatccacctgagcgacctccgggagtacaggcgctttgagaaggagaagctccaggctcaggcgatggtgagcaagggcgaggagaccacaatgggcgtaatcaagcccgacatgaagatcaagctgaagatggagggcaacgtgaatggccacgccttcgtgatcgagggcgagggcgagggcaagccctacgacggcaccaacaccatcaacctggaggtgaaggagggagcccccctgcccttctcctacgacattctgaccaccgcgttcgcctacggcaacagggccttcaccaagtaccccgacgacatccccaactacttcaagcagtccttccccgagggctactcttgggagcgcaccatgaccttcgaggacaagggcatcgtgaaggtgaagtccgacatctccatggaggaggactccttcatctacgagatacacctcaagggcgagaacttcccccccaacggccccgtgatgcagaagaagaccaccggctgggacgcctccaccgagaggatgtacgtgcgcgacggcgtgctgaagggcgacgtcaagcacaagctgctgctggagggcggcggccaccaccgcgttgacttcaagaccatctacagggccaagaaggcggtgaagctgcccgactatcactttgtggaccaccgcatcgagatcctgaaccacgacaaggactacaacaaggtgaccgtttacgagagcgccgtggcccgcaactccaccgacggcatggacgagctgtacaaggggccaggtggtgcagggccaggtggtgcagggccaggtggtgcagggccaggtggtgcagggcccggtggtgcaggtccaggtggtgcaggtccaggtggtgcaggtccaggtggtgctatggtgagcaagggcgaggagctgttcaccggggtggtgcccatcctggtcgagctggacggcgacgtaaacggccacaagttcagcgtgtccggcgagggcgagggcgatgccacctacggcaagctgaccctgaagctgatctgcaccaccggcaagctgcccgtgccctggcccaccctcgtgaccaccctgggctacggcctgcagtgcttcgcccgctaccccgaccacatgaagcagcacgacttcttcaagtccgccatgcccgaaggctacgtccaggagcgcaccatcttcttcaaggacgacggcaactacaagacccgcgccgaggtgaagttcgagggcgacaccctggtgaaccgcatcgagctgaagggcatcgacttcaaggaggacggcaacatcctggggcacaagctggagtacaactacaacagccacaacgtctatatcaccgccgacaagcagaagaacggcatcaaggccaacttcaagatccgccacaacatcgaggacggcggcgtgcagctcgccgaccactaccagcagaacacccccatcggcgacggccccgtgctgctgcccgacaaccactacctgagctaccagtccaagctgagcaaagaccccaacgagaagcgcgatcacatggtcctgctggagttcgtgaccgccgccgggatcactctcggcatggacgagctgtacaaggctcaagcacaaaaggagaagctcaagtcccagtggaacaatgataatccccttttcaagagcgccaccacgacggtcatgaaccccaagtttgctgagagttagtaaaagctt

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

ASATMLGLRPPLLALVGLLSLGCVLSQECTKFKVSSCRECIESGPGCTWCQKLNFTGPGDPDSIRCDTRPQLLMRGCAADDIMDPTSLAETQEDHNGGQKQLSPQKVTLYLRPGQAAAFNVTFRRAKGYPIDLYYLMDLSYSMLDDLRNVKKLGGDLLRALNEITESGRIGFGSFVDKTVLPFVNTHPDKLRNPCPNKEKECQPPFAFRHVLKLTNNSNQFQTEVGKQLISGNLDAPEGGLDAMMQVAACPEEIGWRNVTRLLVFATDDGFHFAGDGKLGAILTPNDGRCHLEDNLYKRSNEFDYPSVGQLAHKLAENNIQPIFAVTSRMVKTYEKLTEIIPKSAVGELSEDSSNVVHLIKNAYNKLSSRVFLDHNALPDTLKVTYDSFCSNGVTHRNQPRGDCDGVQINVPITFQVKVTATECIQEQSFVIRALGFTDIVTVQVLPQCECRCRDQSRDRSLCHGKGFLECGICRCDTGYIGKNCECQTQGRSSQELEGSCRKDNNSIICSGLGDCVCGQCLCHTSDVPGKLIYGQYCECDTINCERYNGQVCGGPGRGLCFCGKCRCHPGFEGSACQCERTTEGCLNPRRVECSGRGRCRCNVCECHSGYQLPLCQECPGCPSPCGKYISCAECLKFEKGPFGKNCSAACPGLQLSNNPVKGRTCKERDSEGCWVAYTLEQQDGMDRYLIYVDESRECVAGPNIAAIVGGTVAGIVLIGILLLVIWKALIHLSDLREYRRFEKEKL**QAQAMVSKGEETTMGVIKPDMKIKLKMEGNVNGHAFVIEGEGEGKPYDGTNTINLEVKEGAPLPFSYDILTTAFAYGNRAFTKYPDDIPNYFKQSFPEGYSWERTMTFEDKGIVKVKSDISMEEDSFIYEIHLKGENFPPNGPVMQKKTTGWDASTERMYVRDGVLKGDVKHKLLLEGGGHHRVDFKTIYRAKKAVKLPDYHFVDHRIEILNHDKDYNKVTVYESAVARNSTDGMDELYKGPGGAGPGGAGPGGAGPGGAGPGGAGPGGAGPGGAGPGGAMVSKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLKLICTTGKLPVPWPTLVTTLGYGLQCFARYPDHMKQHDFFKSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNSHNVYITADKQKNGIKANFKIRHNIEDGGVQLADHYQQNTPIGDGPVLLPDNHYLSYQSKLSKDPNEKRDHMVLLEFVTAAGITLGMDELYKAQAQKEKL**KSQWNNDNPLFKSATTTVMNPKFAES\*