



pAAV-CAG-H2B-mGreenLantern

TAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAG GCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCC GACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACC $\tt TGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCC$ ACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGT GGTGGCCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGT ${\tt TCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTAT$ AGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCATCCATAGTTGCCTGACTCCCCGTCGTGTA GATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTAT $\tt CGGGAAGCTAGAGTAGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTCACGCTCGTC$ $\verb|CCTTCGGTCCTCCGATCGTTGTCAGAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACT| \\$ GTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTG CTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGC GAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTACT ATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGCGTTAA ATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGGG TTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGG $\tt CGATGGCCCACTACGTGAACCATCACCCTAATCAAGTTTTTTTGGGGTCGAGGTGCCGTAAAGCACTAAATCGGAACCCTAAAGGGA$ $\tt CTGGCAAGTGTAGCGGTCACGCTGCGCGTAACCACCACCACCCGCCGCTTAATGCGCCGCTACAGGGCGCGTCCCATTCGCCATT$ ATCACTAGGGGTTCCTTGTAGTTAATGATTAACCCGCCATGCTACTTATCTACGTAGCCATGCTCTAGGAAGAGTACCATTGACGT GTACATGACCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTCGAGGTGAGCCCCACGT $\tt CGGGGGGGACGGGCAGGGCGGGTTCGGCTTCTGGCGTGTGACCGGCGGCTCTAGAGCCTCTGCTAACCATGTTCATGCTTCTTC$ TTTTTCCTACAGCTCCTGGGCAACGTGCTGGTTATTGTGCTGTCTCATCATTTTTGGCAAAGAATTGGATCATCTCTAGAAAGCTTG $A {\tt CAAGCGGAGCACCATCACCAGCCGCGAGATTCAGACAGCCGTCAGACTTCTGCTGCCTGGCGAACTGGCCAAACACGCTGTGTCT}$ GAGGGAACAAAGGCCGTGACCAAGTACACCAGCAGCAGCCACCAGCTGGATCCCCACCAGCCATGGTGTCTAAGGGCGAAGAACT GTTCACCGGCGTGGTGCCCATTCTGGTGGAACTGGACGGGGATGTGAACGGCCACAAGTTCAGCGTTAGAGGCGAAGGCGAAGGGG $\tt ATGCCACAAACGGCAAGCTGACCTGAAGTTCATCTGCACCACCGGAAAGCTGCCCGTGCCTTGGCCTACACTGGTTACCACACTC$ GGATACGGCGTGGCCTGCTTCGCTAGATACCCCGACCATATGAAGCAGCACGACTTCTTCAAGAGCGCCATGCCAGAGGGCTACGT GCAAGAGAGAACCATCAGCTTCAAGGACGACGCACCTACAAGACCAGAGCCGAAGTGAAGTTCGAGGGCGACACCCTGGTCAACC GGATCGTGCTGAAGGGCATCGACTTCAAAGAGGATGGCAACATCCTGGGCCACAAACTTGAGTACAACTTCAACAGCCACAAGGTG TACAAGTGACTCGAGGATAGCTTATCGATAATCAACCTCTGGATTACAAAATTTGTGAAAGATTGACTGGTATTCTTAACTATGTT GCTCCTTTTACGCTATGTGGATACGCTGCTTTAATGCCTTTGTATCATGCTATTGCTTCCCGTATGGCTTTCATTTTCTCCTCCTT

pAAV-CAG-H2B-mScarlet

GAGCGCGCAGAGGGGGGGCCAACTCCATCACTAGGGGTTCCTTGTAGTTAATGATTAACCCGCCATGCTACTTATCTACGTAG GGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTATCATATGCCAAGTACGCCCCCTATTGACGTCAATGAC GGGGCGAGGCGGAGAGTGCGGCGGCAGCCAATCAGAGCGGCGCGCTCCGAAAGTTTCCTTTTATGGCGAGGCGGCGGCGGCGGCG GCCTCTGCTAACCATGTTCATGCCTTCTTCTTTTTCCTACAGCTCCTGGGCAACGTGCTGGTTATTGTGCTGTCTCATCATTTTGG CAAAGAATTGGATCCGGTACCGCCACCATGCCAGAGCCAGCGAAGTCTGCTCCCGCCCCGAAAAAAGGGCTCCAAGAAGGCGGTGAC GCTTCCCGCCTGGCGCATTACAACAAGCGCTCGACCATCACCTCCAGGGAGATCCAGACGGCCGTGCCGCTGCTGCTGCTGGGGA GTTGGCCAAGCACGCCGTGTCCGAGGGTACTAAGGCCATCACCAAGTACACCAGCGCGGTGAGCAAGGGCGAGGCAGTGATCAAGG AGTTCATGCGGTTCAAGGTGCACATGGAGGGCTCCATGAACGGCCACGAGTTCGAGATCGAGGGCGAGGGCCGAGGGCCCCCTAC GAGGGCACCCAGACCGCCAAGCTGAAGGTGACCAAGGGTGGCCCCTTCCCTTCTCCTGGGACATCCTGTCCCTCAGTTCATGTA TGATGAACTTCGAGGACGGCGCGCGTGACCGTGACCCAGGACACCTCCCTGGAGGACGCCCCTGATCTACAAGGTGAAGCTC AGGCCAAGAAGCCCGTGCAGATGCCCGGCGCCTACAACGTCGACCGCAAGTTGGACATCACCTCCCACAACGAGGACTACACCGTG GTGGAACAGTACGAACGCTCCGAGGGCCGCCACTCCACCGGCGGCATGGACGAGCTGTACAAGTGAGAATTCGATATCAAGCTTAT CGATAATCAACCTCTGGATTACAAAATTTGTGAAAGATTGACTGGTATTCTTAACTATGTTGCTCCTTTTACGCTATGTGGATACG $\tt CTGCTTTAATGCCTTTGTATCATGCTATTGCTTCCCGTATGGCTTTCATTTTCTCCTCCTTGTATAAATCCTGGTTGCTGTTCTCTT$ ${\tt GCTGGACAGGGGCTCGCTGTTGGCCACTGACAATTCCGTGGTGTTGTCGGGGGAAATCATCGTCCTTTCCTTGGCTGCTCGCCTGT}$ ${\tt GCCGGCTCTGCGGCTCTTCGCCTTCGCCTCAGACGAGTCGGATCTCCCTTTGGGCCGCCTCCCCGCATCGATACC}$ GTCGACCCGGGCGCCCCTTCGAGCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACTAGAATGCAGTGAAAAAAA TGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTTGTAACCATTATAAGCTGCAATAAACAAGTTAACAACAACAATTGCAT TCATTTTATGTTTCAGGTTCAGGGGGGAGATGTGGGAGGTTTTTTAAAGCAAGTAAAACCTCTACAAATGTGGTAAAATCGATAAGG ATCTTCCTAGAGCATGGCTACGTAGATAAGTAGCATGGCGGGTTAATCATTAACTACAAGGAACCCCTAGTGATGGAGTTGGCCAC GCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGGATAACGCAGGAAAGAACATGTGAGCAAAAG GCCAGCAAAAGGCCAGGAACCGTAAAAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAAT AACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTA AAAGTATATATGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTCGTTCA $\verb|TTATGGCAGCACTGCATAATTCTCTTACTGTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTC|$ TGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGT ${\tt GCTCATCATTGGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCTGTGAGATCCAGTTCGATGTAACCCACTCGTGTGAGATCCAGTTCGATGTAACCCACTCGTGTGAGATCCAGTTCGATGTAACCCACTCGTGTGAGATCCAGTTCGATGTAACCCACTCGTGTGAGATCCAGTTCGATGTAACCCACTCGTGTGAGATCCAGTTCGATGTAACCCACTCGTGTGAGATCTACAGTTCGATGTAACCCACTCGTGTGAGATCTACCACTCGTGTGAGATCTACAGTTCGATGTAACCCACTCGTGTGAGATCTACAGTTCGATGTAACCCACTCGTGTGAGATCTACAGTTCGATGTAACCCACTCGTGTGAGATCTACAGTTCGATGTAACCCACTCGTGTGAGATCTACAGTACAGTACAGTTCGATGTAACCCACTCGTGTGAGATCTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTACAGTA$ CACCCAACTGATCTTCAGCATCTTTTACTTTCACCAGCGTTTCTGGGTGAGCAAAAAACAGGAAGGCAAAAATGCCGCAAAAAAGGGA ATAAGGGCGACACGGAAATGTTGAATACTCATACTCTTTCCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAG CGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAAAAGTGCCACCTAAATTGTAAG $\tt CGTTAATATTTTGTTAAAATTCGCGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTT$ ATAAATCAAAAGAATAGACCGAGATAGGGTTGAGTGTTGTTCCAGTTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCCTAATCAAGTTTTTTTGGGGTCGAGGTGCCG AGAAAGCGAAAGGAGCGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTAACCACCACCACCCGCCGCTTAATGCG $\tt CCGCTACAGGGCGCGTCCCATTCGCCATTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCCTCTTCGCTATTACGCCA$