



Bacterial expression vector pHT-497

Product: 6X His-tagged rat DYRK1A kinase domain (residues 1-497)

Product calculated MW: 57952.4

Promoter: T7 RNA polymerase promoter

Parent vector: modified pND1, Amp^R

Required host for expression: BL21 or strains containing T7 RNA polymerase

Reference:

Liu, Y., Adayev, T., and Hwang, Y. W. (2017) An ELISA DYRK1A Non Radioactive Assay Suitable for the Characterization of Inhibitors. F1000Research (<https://f1000research.com/articles/6-42/>)

TAGGTGAAGATCCTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTTCGTTC 1200
ATCCACTTCTAGGAAAACTATTAGAGTACTGGTTTTAGGGAATTGCACTCAAAAGCAAG

CACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTG 1260
GTGACTCGCAGTCTGGGGCATCTTTTCTAGTTTCTAGAGAAGTCTAGGAAAAAAGAC

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CGCGTAATCTGCTGCTTGCAAACAAAAAACCACCGCTACCAGCGGTGGTTTTGTTTGCCG 1320
GCGCATTAGACGACGAACGTTTTGTTTTTTTTGGTGGCGATGGTCGCCACCAAACAAACGGC

GATCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGATACCA 1380
CTAGTTCTCGATGGTTGAGAAAAAGGCTTCCATTGACCGAAGTCGTCTCGCGTCTATGGT

AATACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCG 1440
TTATGACAGGAAGATCACATCGGCATCAATCCGGTGGTGAAGTTCTTGAGACATCGTGGC

CCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCG 1500
GGATGTATGGAGCGAGACGATTAGGACAATGGTCACCGACGACGGTCACCGCTATTCAGC

TGTCTTACCGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCTGGGCTGA 1560
ACAGAATGGCCCAACCTGAGTTCTGCTATCAATGGCCTATTCCGCGTCGCCAGCCCGACT

ACGGGGGGTTCGTGCACAGAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATAC 1620
TGCCCCCAAGCACGTGTCTCGGGTCTGAACCTCGCTTGTGGATGTGGCTTGACTCTATG

CTACAGCGTGAGCATTGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTAT 1680
GATGTCGCACTCGTAACTCTTTTCGCGGTGCGAAGGGCTTCCCTCTTTCCGCCTGTCCATA

CCGGTAAGCGGCAGGGTCTGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGAAACGCC 1740
GGCCATTCGCCGTCCAGCCTTGTCTCTCGCGTGCTCCCTCGAAGGTCCCCCTTTGCGG

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◇ ◇ ◇ ◇ ◇
TGGTATCTTTTATAGTCTGTGCGGTTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGA 1800
ACCATAGAAATATCAGGACAGCCCAAAGCGGTGGAGACTGAACTCGCAGCTAAAAACT

TGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTACGGTTC 1860
ACGAGCAGTCCCCCGCCTCGGATACCTTTTTGCGGTCTTGCGCCGAAAAATGCCAAG

CTGGCCTTTTGTGGCCTTTTGTCTCACATGTTCTTTTCTGCGTTATCCCCTGATTCTGTG 1920
GACCGGAAAACGACCGGAAAACGAGTGTACAAGAAAGGACGCAATAGGGGACTAAGACAC

pHT-497 Sequence

ATTTCTTGAAGACGAAAGGGCCTCGTGTTACGCCTATTTTTATAGGTTAATGTCATGATAATAATGGTTTTCTTAGACGTCAGGT
GGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTTGTTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAA
TAACCCTGATAAATGCTTCAATAATATTGAAAAAGGAAGAGTATGAGTATTCAACATTTCCGTGTGCGCCCTTATTCCCTTTTTT
CCGGCATTTCCTTCCCTGTTTTTGGCTCACCCAGAAACGCTGGTGAAAGTAAAAGATGCTGAAGATCAGTTGGGTGCACGAGTG
GGTTACATCGAACTGGATCTCAACAGCGGTAAGATCCTTGAGAGTTTTCGCCCCGAAGAAGTTTTTCCAATGATGAGCACTTTT
AAAGTTCTGCTATGTGGCGCGGTATTATCCCCTATTGACGCCGGGCAAGAGCAACTCGGTGCGCCGATACACTATTCTCAGAAT
GACTTGGTTGAGTACTACCAGTACAGAAAAGCATCTTACGGATGGCATGACAGTAAGAGAATTATGCAGTGTGCCATAACC
ATGAGTGATAACACTGCGGCCAECTTACTTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTTTGCACAACATGGGG
GATCATGTAACCTCGCCTTGATCGTTGGGAACCGGAGCTGAATGAAGCCATACCAAACGACGAGCGTGACACCACGATGCCTGTA
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CGGATAAAGTTGCGAGGACCACTTCTGCGCTCGGCCCTTCCGGCTGGCTGGTTTTATTGCTGATAAATCTGGAGCCGGTGAGCGT
GGGTCTCGCGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCCTATCGTAGTTATCTACACGACGGGGAGTCAGGCA
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CGCGTAATCTGCTGCTTGCAAACAAAAAACCCGCTACCAGCGGTGGTTTTGTTTGGCGGATCAAGAGCTACCAACTCTTTTT
CCGAAGGTAACCTGGCTTCCAGCAGAGCGCAGATACCAAATACTGTCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAAC
TCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACC
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CCGGTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGAAACGCCTGGTATCTTTATAGTCTGTGCGG
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ACCTTCATCTGTCCGGCTCGCACCGTCACTTCTCATTCCATGCTGCTGGCCTTCCAGATGGCTGCACAGATGCCCCATTCACATCA
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ACTCTCTGTGGACTTGATCAAAACATAACAAGCATATTAATGAGGTTTTACTATGCAAAAAAGAAGCGAAGACACCAACAGGGCCA
GGGGGACGATTCTAGTCATAAGAAGGAGCGGAAGGTTTACAACGATGGTTACGATGACGATAACTATGATTACATTGTA
CGGAGAAAAGTGGATGGACCGTTATGAAATCGACTCCTTAATAGGCAAAGGTTTCAATTTGGACAGGTTGTGAAAGCATATGACAG
AGTGGAACAAGAATGGGTGCGCCATTAATAATCATCAAGAACAAGAAGGCGTTTTCTGAATCAAGCGCAGATAGAAGTGGCGTGT
TGAGCTCATGAACAAACATGACACTGAGATGAAGTACTACATAGTGCATTTGAAACGCCACTTTATGTTTTCGGAACCATCTCTG
TCTAGTGTTTGAAATGCTGTCTTATAATCTCTATGATTTGTTGAGGAACACCAACTTCCGAGGGTCTCTTTGAACCTGACACG
AAAGTTTGACACAACAGATGTGCACAGCATTGCTTTTCTTGGGACTCCAGAACTTAGTATCATTCACTGTGACTTAAAGCCGGA
GAACATCCTTCTGTGTAACCCAAACGAAGTGCAATCAAGATTGTTGACTTTGGCAGCTCTTGTGAGTTGGGGCAGAGGATATA
CCAGTATATTGAGAGTGCCTTCTATCGGTCTCCAGAGGTGCTACTGGGAATGCCTTATGACCTTGCTATCGACATGTGGTCCCT
TGGATGTATCTTGGTTGAAATGCACACTGGAGAGCCTCTGTTTCAAGTGGTGCCTAATGAGGTGGATCAGATGAATAAAATAGTGG
AGTCTTGGGCATCCCACCTGCTCATATTCTTGACCAAGCACCGAAAGCAAGAAAGTTCTTTGAGAAGTTGCCTGATGGCACTTG
GAGCTTAAAGAAGACCAAGATGGAAAACGGGAGTACAAACCACAGGAACCCGTAACCTTATAATATTCTTGGAGTGGAAAC
AGGAGGACCTGGCGGGCGGCGTGTGGGGAGTCAAGTGTAGCTGACTACTTGAAGTTCAAAGACCTCATTTTAAGGAT
GCTTGATTATGACCCAAAACCTCGGATTCAACCTTATTATGCCCTGCAGCACAGTTTTTTTCAAGAAAACAGCTGATGAAGGTAC
AAACACAAGCAACAGTGTGTCCACCAGCCCTTGACTCGAGTAGCTTGCATCTATGGTCTCTCCCTTATGAGGGTTAATTAGA
AACTGGAGTCGATGATAAGCTGTCAAACATGAGAATT