



University of the
West of England

BRISTOL

Forshaw, T. E. (2017) *The role of increased hBCATm in the endothelial cells of patients with Alzheimers disease*. PhD, University of the West of England. Available from: <http://eprints.uwe.ac.uk/29844>

We recommend you cite the published version.

The publisher's URL is:

<http://eprints.uwe.ac.uk/29844/>

Refereed: No

(no note)

Disclaimer

UWE has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

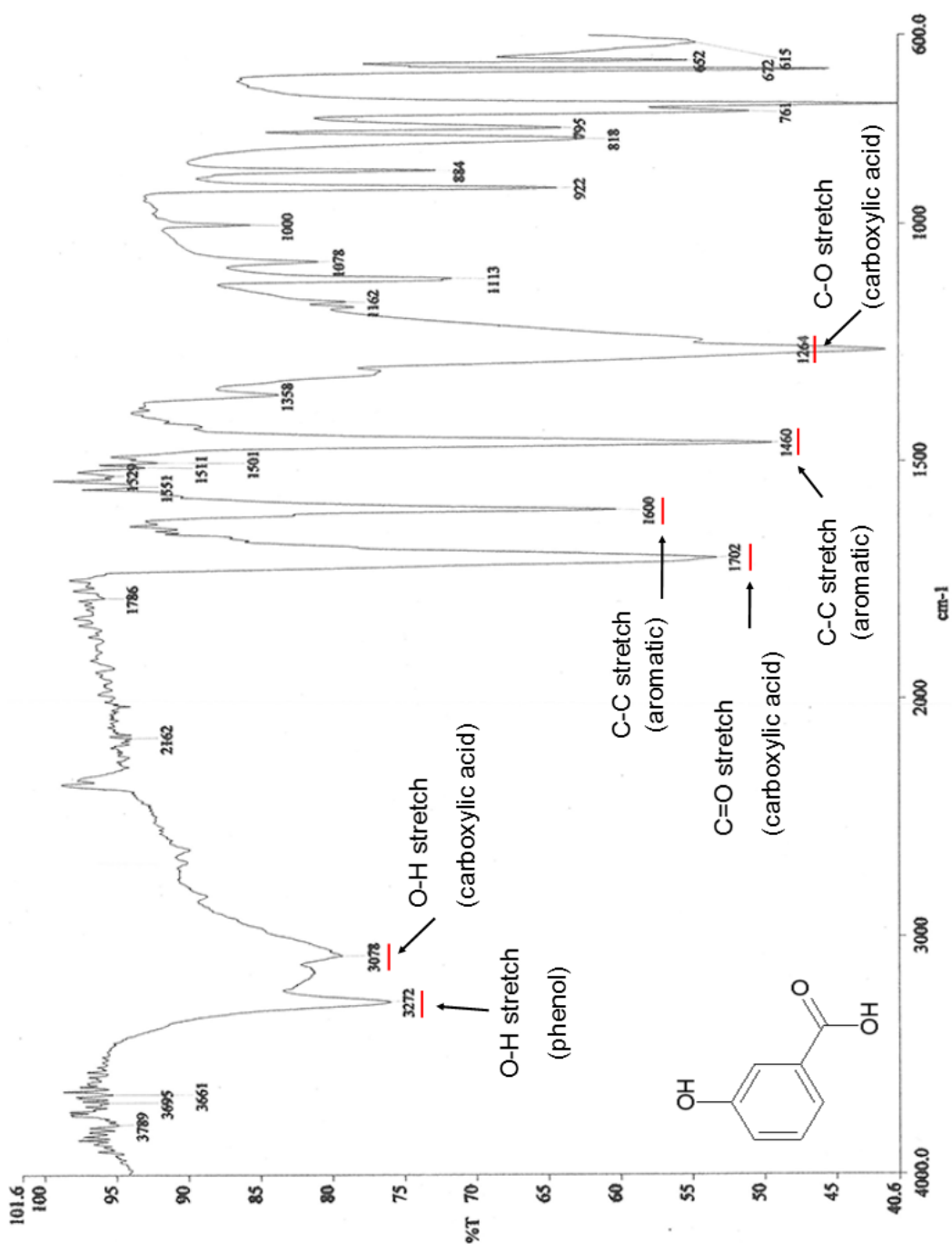
UWE makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

UWE makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

UWE accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

Appendix

APPENDIX A – Chemical synthesis spectra.

A.1 – FT-IR spectra of compound isolated from DCC catalysed esterification. The compound was identified as starting material.

APPENDIX B – DNA sequencing.**B.1 Partial sequence of pCW57.1-BCAT1, pCEP-Forward primer:**

GCTCACAAGTTTGTACAAAAAAGCAGGCTTCATGAAGGATTGCAGTAACGGATGCTCCGCAGAG
 TGTACCGGAGAAGGAGGATCAAAAGAGGTGGTGGGGACTTTTAAGGCTAAAGACCTAATAGTCA
 CACCAGCTACCATTTTAAAGGAAAAACCAGACCCCAATAATCTGGTTTTTGGAACTGTGTTTAC
 GGATCATATGCTGACGGTGGAGTGGTCCTCAGAGTTTGGATGGGAGAAACCTCATATCAAGCCT
 CTTCAGAACCTGTCATTGCACCCTGGCTCATCAGCTTTGCACTATGCAGTGAATTATTTGAAG
 GATTGAAGGCATTTTCGAGGAGTAGATAATAAAATTCGACTGTTTTAGCCAAACCTCAACATGGA
 TAGAATGTATCGCTCTGCTGTGAGGGCAACTCTGCCGGTATTTGACAAAGAAGAGCTCTTAGAG
 TGTATTC AACAGCTTGTGAAATTTGGATCAAGAATGGGTCCCATATTC AACATCTGCTAGTCTGT
 ATATTCGTCCTACATTCATTGGAAGTGAAGCCTTCTCTTGGAGTCAAGAAGCCTACCAAAGCCCT
 GCTCTTTG TACTCTTGAGCCCAGTGGGACCTTATTTTTCAAGTGGAAACCTTTAATCCAGTGTCC
 CTGTGGGCCAATCCCAAGTATGTAAGAGCCTGGAAAGGTGGAAGTGGGGACTGCAAGATGGGAG
 GGAATTACGGCTCATCTCTTTTTGCCCAATGTGAAGCAGTAGATAATGGGTGTCAGCAGGTCCT
 GTGGCTCTATGGAGAGGACCATCAGATCACTGAAGTGGGAACTATGAATCTTTTTCTTTACTGG
 ATAAATGAAGATGGAGAAGAAGAAGTGGCAACTCCTCCACTAGATGGCATCATTCTTCCAGGAG
 TGACAAGGCGGTGCATTCTGGACCTGGCACATCAGTGGGGTGAATTTAAGGTGTCA

Sequence is a 100% match for “Homo sapiens branched chain amino acid
 transaminase 1 (BCAT1), transcript variant 1, mRNA” NCBI Reference Sequence:
 NM_005504.6.

B.2 Partial sequence of pCW57.1-BCAT2:

AAGTTTGTACAAAAAAGCAGGCTGGCGCGCCATGGCCGCTGCTGCTCTGGGACAGATTTGGGCC
 AGAAAGCTGCTGAGCGTGCCCTGGCTGCTGTGCGGCCCTAGAAGATACGCCAGCAGCAGCTTCA
 AGGCCGCCGACCTGCAGCTGGAAATGACCCAGAAGCCCCACAAGAAGCCCGGACCTGGCGAGCC
 TCTGGTGTTCGGCAAGACCTTCACCGACCACATGCTGATGGTGAATGGAACGACAAGGGCTGG
 GGCCAGCCCAGAATCCAGCCCTTCCAGAACCTGACCCTGCACCCTGCCAGCAGCTCCCTGCACT
 ACTCTCTGCAGCTGTTTCGAGGGCATGAAGGCCTTTAAGGGCAAGGACCAGCAAGTGGCGCTGTT
 CAGACCCTGGCTGAACATGGACCGGATGCTGCGGAGCGCCATGAGACTGTGCCTGCCAGCTTC
 GACAAGCTGGAAGTGTGGAATGCATCCGGCGGCTGATCGAGGTGGACAAGGACTGGGTGCCCCG
 ATGCCGCCGGAACAAGCCTGTATGTGCGGCCTGTGCTGATCGGCAACGAGCCTAGCCTGGGAGT

GTCCCAGCCTACCAGAGCCCTGCTGTTTCGTGATCCTGTGTCCCGTGGGCGCCTACTTTCCTGGC
 GGATCTGTGACCCCAGTGTCCCTGCTGGCCGACCCCGCCTTTATTAGAGCTTGGGTGGGAGGCG
 TGGGCAACTACAAGCTGGGCGGAACTACGGCCCCACCGTGCTGGTGCAGCAGGAAGCTCTGAA
 GCGGGGCTGCGAACAGGTGCTGTGGCTGTACGGACCCGACCACCAGCTGACCGAAGTGGGCACC
 ATGAACATCTTCGTGTACTGGACCCACGAGGACGGCGTGCTGGAACCTCGTGACCCCTCCTCTGA
 ACGGCGTGATCCTGCCTGGCGTCGTGCGGCAGTCTCTGCTGGATATGGCCCAGACCTGGGGCGA
 GTTCCGGGTGGTGG

Amino acid sequence produced by translation of this sequence is the same as “Homo sapiens branched chain amino acid transaminase 2 (BCAT2), transcript variant a, mRNA” NCBI Reference Sequence: NM_001190.3.

B.3 Partial sequence of pLKO-BCAT1:

cttataagttccctatcagtgatagagacaCCGGCTGCCGGTATTTGACAAAGAACTCGAGTTC
 TTTGTCAAATACCGGCAGTTTTTaattctcgacctcgagacaaatggcagtattcatccacaat
 tttaaaagaaaaggggggattggggggtacagtgacaggggaaagaatagtagacataatagcaa
 cagacatacaaaactaaagaattacaaaaacaaattacaaaaattcaaaattttcgggtttatta
 cagggacagcagagatccactttggccgcggtctcgagggggtgggggtgcgcttttccaagg
 cagccctgggtttgcgacagggacgcggctgctctgggcgtggttccgggaaacgcagcggcgcc
 gaccctgggtctcgcacattcttcacgtccgttcgcagcgtcaccggatcttcgcccgtacc
 ttgtgggccccccggcgacgcttctgctccgcccctaagtcgggaaggttcttgcggttcgc
 ggcgtgccggacgtgacaaacggaagccgcacgtctcactagtagccctcgacagcggacagcgc
 cagggagcaatggcagcgcgaccgcgatgggctgtggccaatagcggctgctcagcagggc
 gcgccgagagcagcggccgggaaggggcggtgcgggagggcggg

The uppercase letters match the shRNA sequence provided by Bernhard Radlwimmer for the pLKO-BCAT1 sequence.