

The invention provides a nucleic acid sequence comprising a sequence of contiguous nucleotides, wherein said sequence of contiguous nucleotides has at least 90 % sequence identity to the nucleic acid sequence of SEQ ID NO: 1, and wherein said sequence of contiguous nucleotides encodes a single-chain BoNT/E1 protein. The present invention also provides methods for producing soluble single-chain BoNT/E protein in an E. coli host cell, together with methods for producing soluble di-chain 10 BoNT/E1 protein.