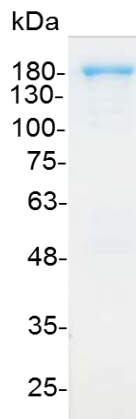


Catalog number	C12002-100UG / C12002-500UG
Package	100 µg / 500 µg
Description	<p>The enhanced specificity Cas9 protein (modified at sites K848A/K1003A/R1060A) exhibit substantially reduced off-target cleavage in cells. The Cas9 nuclease is an RNA-guided DNA endonuclease enzyme associated with the CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) adaptive immunity system in <i>Streptococcus pyogenes</i>, among other bacteria.</p> <p>When combined with target RNAs, eSpCas9 protein will act as a targeted nuclease suitable for transfection of cell cultures and for the accelerated development of genetically-modified animals via one-cell embryo injection.</p>
Source	<i>Escherichia coli</i>
Sequence	<p>MDKKYSIGLDIGTNSVGWAVITDEYKVPSSKFKVLGNTDRHSIKKNLIGALLFDS GETAEATRLKRTARRRYTRRKNRICYLQEIFSNEMAKVDDSFHRLVESFLVEE DKKHERHPIFGNIVDEVAYHEKYPTIYHLRKKLVDSTDKADLRLIYLALAHMIKFR GHFLIEGDLNPDNSDVKLFIQLVQTYNQLFEENPINASGVDAKAILSARLSKSR RLENLIAQLPGEKKNLFGNLIASLGLTPNFKSNFDLAEDAQLQSKDYYDDDL DNLLAQIGDQYADLFLAAKNLSDAILLSDILRVNTEITKAPLSASMIKRYDEHHQD LTLKALVRQQLPEKYKEIFFDQSKNGYAGYIDGGASQEEFYKFIKPILEKMDGT EELLVKNLREDLLRKQRTFDNGSIPHQIHLGELHAILRRQEDFYFPLKDNREKIE KILTRIPYYVGPLARGNSRFAMTRKSEETITPWNFEEVVDKGASAQSFIERM TNFDKNLPNEKVLPHKSLLEYFTVYNELTKVKYVTEGMRKPAFLSGEQKKAIV DLLFKTNRKVTVKQLKEDYFKKIECFDSVEISGVEDRFNASLGTYHDLLKIIKDKD FLDNEENEDILEDIVLTLTLFEDREMIEERLKYAHLFDDKVMKQLKRRRYTGW GRLSRKLINGIRDKQSGKTILDFLKSDGFANRNFMQLIHDDSLTFKEDIQKAQVS GQGDSLHEHIANLAGSPAIKKILQTVKVVDELVKVMGRHKPENIVIEMARENQ TTQKGQKNSRERMKRIEELGKELGSKLKEHPVENTQLQNEKLYLYYLQNGRD MYVDQELDINRLSDYDVDHIVPQSFLADDSIDNKVLTRSDKNRKGSDNVPSEEV VKMKNYWRQLLNAKLITQRKFDNLTKAERGGSELKAGFIKRLVETRQITK HVAQILDSRMNTKYDENDKLIREVKVITLKSCLVSDFRKDFQFYKVINNYHHA HDAYLNAVVGTAIIKYPALSEFVYGDYKVYDVRKMIKSEQEIGKATAKYFFY SNIMNFFKTEITLANGEIRKAPLIETNGETGEIVWDKGRDFATVRKVLSPQVNI VKKTEVQTGGFSKESILPKRNSDKLIARKKDWDPKKGFFSPTVAYSVLVVAK VEKGSKLLKSVKELLGITIMERSSEFEKNPIDFLEAKGYKEVKKDLIILPKYSLFE LENGKRMLASAGELQKGNELALPSKYVNFYLYLASHYEKLGSPEDNEQKQLF VEQHKHYLDEIIEQISEFSKRVLADANLDKVL SAYNKHRDKPIREQAENIIHLFTL TNLGAPAAFYFDTTIDRKRYTSTKEVLDTLIHQSIITGLYETRIDLSQLGGD with polyhistidine tag and maltose binding protein at the N-terminus</p>

Endotoxin level	<0.1 EU per 1 µg of the protein by the LAL method.
Purity	>98% as determined by SDS-PAGE.
Formulation	The protein was lyophilized from a solution containing 1X PBS containing, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 100 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Storage	Lyophilized protein should be stored at -20°C. Upon reconstitution, protein aliquots should be stored at -20°C or -80°C.
Note	Please use within one month after protein reconstitution.



SDS-PAGE analysis of recombinant eSpCas9 (1.1)

For research use only.