

Table S1. Primers used for plasmid cloning in *E. coli*.

Chimaeric protein	Cloning product	Sequence 5'-3'	Sequence 5'-3'	Source of template
<i>CbScafGTV</i>	Scaffoldin: CohG-Coh T- CBM3b-Coh V	cctacaacacactacaac	ccttatctgtccacctgc	<i>C. bescii</i> DSM 6725 and <i>EcScafGTV</i> _a
		acctgcaggtggacag ataaagg	aggtggttaggtggtgta gg	
		caattgtaattgcctgc	ctacaccaaccaaac	
		tgacgttggtggtgta	gtcagcagggcaattac	
		g	aaattg	

The cloning was conducted in pET9d plasmid.

^a Moraïs, S., Stern, J., Kahn, A., Galanopoulou, A. P., Yoav, S., Shamshoum, M., Smith, M. A., Hatzinikolaou, D. G., Arnold, F. H., and Bayer, E. A. (2016) Enhancement of cellulosome-mediated deconstruction of cellulose by improving enzyme thermostability. *Biotechnol. Biofuels* 9:164.

Table S2. Primers used for plasmid cloning in *Ca. bescii*.

Chimaeric enzymes	Name	Sequence 5'-3'	Source of template
<i>CbScafGTV</i>	DCB413	aaacgaaccagccctaacctcttg	pDCYB038 _a
<i>CbScafGTV</i>	DCB414	catcaccatcaccatcactaataataaagct	pDCYB038 _a
<i>CbScafGTV</i>	DCB415	aggttagggctggttcggttgctctccgaaaactaccatc	pSMAK _b
<i>CbScafGTV</i>	DCB415	tagtgatggtgatggtgatgattgagccaaccaatagctcca	pSMAK _b
<i>CbGH48-Ik-t</i>	DCB402	aaacgaaccagccctaacctcttgcca	pDCYB134 _a
<i>CbGH48-Ik-t</i>	DCB403	catcaccatcaccatcactaataataaagctgaaataaaagagg	pDCYB134 _a
<i>CbGH48-Ik-t</i>	DCB432	aggttagggctggttcggttaccgtctactaaattatagc	<i>EcGH48-Ik-t</i>
<i>CbGH48-Ik-t</i>	DCB433	tagtgatggtgatggtgatggtggtaccgaacaggattcatag	<i>EdGH48-Ik-t</i>
<i>CbGH9-Ik-v</i>	DCB402	aaacgaaccagccctaacctcttgcca	pDCYB134 _a
<i>CbGH9-Ik-v</i>	DCB403	catcaccatcaccatcactaataataaagctgaaataaaagagg	pDCYB134 _a
<i>CbGH9-Ik-v</i>	DCB436	aggttagggctggttcggttaactatggcgaggccctg	<i>EcGH9-Ik-v</i>
<i>CbGH9-Ik-v</i>	DCB437	tagtgatggtgatggtgatggtggttctcaactgggaataaggatattttc	<i>EcGH9-Ik-v</i>

The cloning was initially conducted in *E. coli* pSC101 plasmid.

^a Chung, D., Young, J., Bomble, Y.J., Vander Wall, T. A., Groom, J., Himmel, M.E., Westpheling, J. (2015) Homologous Expression of the *Caldicellulosiruptor bescii* CelA reveals that the extracellular protein is glycosylated. *PLOS ONE* 10:1371.

^b Moraïs, S., Stern, J., Kahn, A., Galanopoulou, A. P., Yoav, S., Shamshoum, M., Smith, M. A., Hatzinikolaou, D. G., Arnold, F. H., and Bayer, E. A. (2016) Enhancement of cellulosome-mediated deconstruction of cellulose by improving enzyme thermostability. *Biotechnol. Biofuels* 9:164.

Table S3. Primers used for *Ca. bescii* plasmid verification.

Chimaeric enzymes	Name	Sequence 5'-3'	Source of template
<i>CbScafGTV</i>	DC008	agagtagagcgtgatgacataga	pDCYB038 ^a
<i>CbScafGTV</i>	DCB010	atcatccccttttgctgatgga	pDCYB038 ^a
<i>CbGH48-lk-t</i> <i>CbGH9-lk-v</i>	DCB397	actgcaaaaattcagctcacca	pDCYB137
<i>CbGH48-lk-t</i>	DCB434	ggtagcaccggttatgatag	<i>EcGH48-lk-t</i>
<i>CbGH48-lk-t</i>	DCB435	tcgggttctgatagccaaag	<i>EcGH48-lk-t</i>
<i>CbGH9-lk-v</i>	DCB438	ccgagcaccaagaaagaaat	<i>EcGH9-lk-v</i>
<i>CbGH9-lk-v</i>	DCB439	tacagggtgtggcgatgata	<i>EcGH9-lk-v</i>

^a Chung, D., Young, J., Bomble, Y.J., Vander Wall, T. A., Groom, J., Himmel, M.E., Westpheling, J. (2015) Homologous Expression of the *Caldicellulosiruptor bescii* CelA reveals that the extracellular protein is glycosylated. *PLOS ONE* 10:1371.