

## Supplementary Materials

**Table S1.** The procedures of absorption washing chambers.

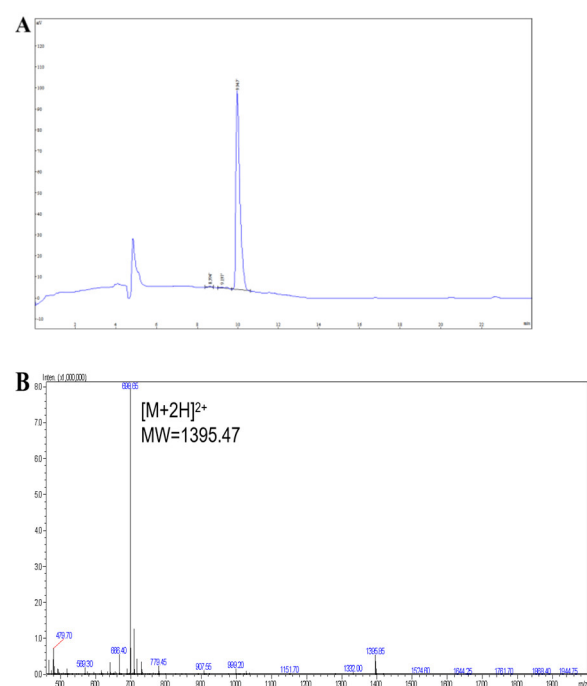
Transwell	Procedures		
apical	stop solution 0.5ml/each, three times	removal solution 0.5 ml/each, once	stop solution 0.5ml/each, twice
intermediate	1 N NaOH 0.5 mL/each, twice		
basal	stop solution 1.5mL/ each time, once		

**Table S2.** LC-MS/MS- based identification of the simulated gastrointestinal digests of the CBP, CBP-H, CBP-calcium, CBP-H-calcium complex.

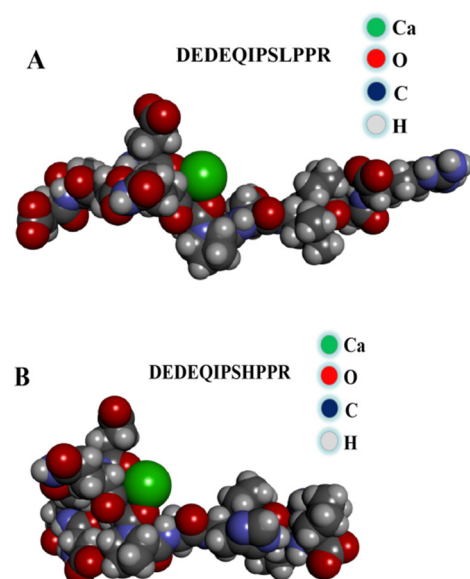
Sequence	Peptide	Denovo Score	m/z	Conf. (%)
Initial 1	DEDEQIPSHPPR	99	710.8283	99
Initial 2	DEDEQIPSLPPR	99	710.8012	99
Digestion product 1	DEDEQIPSHPPR	99	710.3239	99
Digestion product 2	DEDEQIPSLPPR	99	710.7068	99
Digestion product 3	EDEQIPSHPPR	99	645.8048	99
Digestion product 4	DEQIPSLPPR	99	581.2893	99

**Table S3.** Sequence, Localization and physicochemical properties of CBP-H-calcium complexes.

AA sequence	-CDOCKER ENERGY	Name	Distance	From	To
DEDEQIPSLPPR	17.624	Ca <sup>2+</sup> :DEDEQIP-SLPPR:O <sub>56</sub>	2.76934	Ca <sup>2+</sup>	DEDEQIPSLPPR:O <sub>56</sub>
		Ca <sup>2+</sup> :DEDEQIP-SLPPR:O <sub>92</sub>	2.74928	Ca <sup>2+</sup>	DEDEQIPSLPPR:O <sub>92</sub>
DEDEQIPSHPPR	23.2059	Ca <sup>2+</sup> :DEDEQIP-SHPPR:O <sub>56</sub>	2.56309	Ca <sup>2+</sup>	DEDEQIPSHPPR:O <sub>56</sub>
		Ca <sup>2+</sup> :DEDEQIP-SHPPR:O <sub>92</sub>	2.60394	Ca <sup>2+</sup>	DEDEQIPSHPPR:O <sub>92</sub>
DEDEQIPHHPPR	21.8751	Ca <sup>2+</sup> :DEDE-QIPHHPPR:O <sub>56</sub>	2.50702	Ca <sup>2+</sup>	DEDEQIPHHPPR:O <sub>56</sub>
		Ca <sup>2+</sup> :DEDE-QIPHHPPR:O <sub>92</sub>	2.55158	Ca <sup>2+</sup>	DEDEQIPHHPPR:O <sub>92</sub>
DEDHQIPSHPPR	12.3839	Ca <sup>2+</sup> :DEDHQIPHHPPR:O <sub>70</sub>	2.48884	Ca <sup>2+</sup>	DEDHQIPHHPPR:O <sub>70</sub>
DHDHQIPSHPPR	15.8871	Ca <sup>2+</sup> :DHDHQIPHHPPR:O <sub>96</sub>	2.57541	Ca <sup>2+</sup>	DHDHQIPHHPPR:O <sub>96</sub>
		Ca <sup>2+</sup> :DHDHQIPHHPPR:O <sub>121</sub>	2.6225	Ca <sup>2+</sup>	DHDHQIPHHPPR:O <sub>121</sub>



**Figure S1.** Identifications of CBP-H by HPLC-MS. **(A):** The MS spectrum of CBP-H. **(B):** The MS/MS spectrum of CBP-H.



**Figure S2.** Docking calculations for the interaction of soybean peptide **(A):** CBP-H. **(B):** CBP with  $\text{Ca}^{2+}$ .