Table S1. Peptide sequences identified by the peptidomics approach (RP-HPLC-MS/MS and the bioinformatic retreatment of MS data), and the predicted DPP-IV IC_{50} value obtained by the QSAR analysis.

Substrate	Peptide sequence	Predicted DPP-IV IC_{50} ($\mu g.mL^{-1}$)
Hemoglobin	LVVYPWT	too small
	FAED	too small
	YPWT	too small
	LLGN	too small
	VVYPWT	too small
	VLDS	too small
	LLGNV	too small
	FTPA	23.60
	CFS	25.41
	WH	46.32
	LLVVYP	48.05
	HLDD	125.24
	HVDPEN	147.65
	LVVYP	159.59
	LIVTQTMKGLDIQKVAGTWYSLA-MAASDISLLDAQSAPLR	175.04
	FGDL	267.09
Caseins	WC	too small
	WL	too small
	FPK	too small
	LVYPFPGPIPN	too small
	LVYPFPGPIHN	too small
	FPEV	too small
	LLS	too small
	FLPYP	too small
	YPFPGPIPN	too small
	FPM	too small
	YPE	too small
	LFC	too small
	YAEA	too small
	LPH	too small
	LPQ	5.59
	YFYPE	38.70
	VPN	146.00
	FM	153.44
	LVYPFPGPI	167.05
	LVYPFPGPI	167.05
	LIVTQTMKGLDIQKVAGTWYSLA-MAASDISLLDAQSAPLR	175.04
	TLTDVEN	192.62
	LPYP	223.65

	WQ	233.69
	YM	246.95
	LPPL	288.37
	LIDIGVAG	288.84
Ovalbumin	ILELPFASGTMS	too small
	ILELPFASGT	too small
	LLPDE	too small
	VLLPDEVSGLEQLES	too small
	LLPDEV	too small
	LPE	too small
	VLLPD	too small
	VLQPS	too small
	LPDE	too small
	LVLLPDEV	too small
	VLQPSSVDS	too small
	LPDEV	too small
	VLLPDEVSGLEQLESIINFEK	44.63
	ILELPFASGTM	45.40
	VLLPDEVSGLEQLESIINFE	101.70
	ISQAVHA	113.91
	LPR	125.42
	ILELPFASGTMSM	133.16
	VLLPDE	139.70
	LLPDEVSG	200.06
	VLLPDEV	227.83
Whey protein	WL	too small
	FLDDDLTDD	too small
	WT	too small
	FPE	too small
	LIVTQTMKGLDIQKVAGTWYSLA-MAASDISLLDAQSAPLRVYVEELKPTPEGDLEILLQK	too small
	LGYS	too small
	LVYPFPGPIPN	too small
	LLD	too small
	LLS	too small
	LVNE	too small
	LPE	too small
	YVEELKPTPE	too small
	FLDDDLTDDI	too small
	LVLDTD	too small
	LVTD	too small
	FLDDDL	too small
	LPH	too small
	LPLS	too small
	CLLA	too small
	LPQ	5.59
	FLDDDLTDDIM	16.09
	LLK	25.24

	LLH	30.76
	FME	40.58
	WH	46.32
	CLME	62.53
	YVEELKPTPEGDLE	117.33
	LPV	119.59
	LPM	125.76
	LPMH	156.54
	VLDTD	157.00
	LVYPFPGPI	167.05
	LIVTQTMKGLDIQKVAGTWYSLA-MAASDISLLDAQSAPLR	175.04
	YVE	187.83
	LLLV	208.44
	LPYP	223.65
	WQ	233.69
	VPPE	240.28
	LPPL	288.37
	DLKA	293.93
Pea proteins	WM	too small
	YLGGNPET	too small
	FVPH	too small
	LLYV	too small
	LFEN	too small
	LLPH	too small
	MLPH	too small
	LLSGN	too small
	LLENQ	too small
	VFKT	too small
	LLTT	too small
	LVEV	too small
	LPH	too small
	FLM	too small
	VLFA	too small
	FVSK	too small
	LFE	too small
	LAKV	too small
	LPQ	5.59
	VLASLPT	41.17
	WD	97.96
	LGPK	108.85
	LPR	125.42
	LFLPQ	127.37
	VPN	146.00
	LLFL	149.78
	FM	153.44
	FPF	167.94
	YVE	187.83

	LGGC	215.87
	MLM	238.78
	YM	246.95
	TLDYWPS	251.18
Gluten proteins	WP	too small
	YVFD	too small
	FPQ	too small
	LPT	too small
	FGMA	too small
	LLPR	too small
	VLFA	too small
	LPQ	5.59
	LLAA	28.51
	YPTSPQ	87.23
	WD	97.96
	LPV	119.59
	LPR	125.42
	FPF	167.94

Predicted DPP-IV IC_{50} values were calculated according to the v-scale and the QSAR model [66]. The DPP-IV IC 50 values below 0 are marked as 'too small', and are assumed to be very efficient inhibitors.

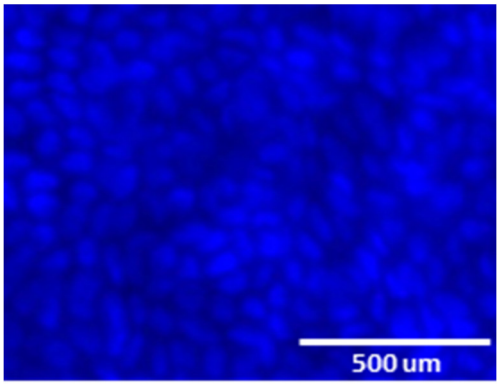


Figure S1. Caco-2/HT29-MTX monolayer after 21 days of culturing.

Fluorescent microphotography of a Caco2/HT29-MTX differentiated-cell monolayer after 21 days of culturing. The cells were seeded at day 0 on inserts at a Caco-2/HT29-MTX ratio of 90/10, and at a density of 20,000 cells per cm^2. The insert was washed with PBS and cut up to be incubated for fifteen minutes in the dark with NucBlue Live Cell Stain ReadyProbes reagent (Invitrogen, Waltham (MA), USA). Photographs were taken with an Evos FL microscope (Life Technologies, Carlsbad (CA), USA). The confluence of the cells was reached after 7 days of culturing, and the differentiation continued for about 14 days. The TEER mean values obtained during the differentiation were about 80, 310, 520, and between 750 and 1000 Ω.cm-2 after 9, 12, 16 and 21 days of culturing, respectively.