

A

BITC ( $\mu$ M)/ cell line	0	1.25	2.5	5	10	20
CLBL-1 (%)	92.9 $\pm$ 3.44	90.5 $\pm$ 2.88	69.3 $\pm$ 3.18	26.23 $\pm$ 4.68	10.91 $\pm$ 3.91	7.29 $\pm$ 3.65
CLB70 (%)	88.5 $\pm$ 1.93	86.2 $\pm$ 1.47	65.76 $\pm$ 2.06	33.63 $\pm$ 8.26	16.26 $\pm$ 7.48	8.52 $\pm$ 1.22
GL-1 (%)	92.03 $\pm$ 2.85	92 $\pm$ 2.69	88.9 $\pm$ 4.03	79.56 $\pm$ 3.41	54.86 $\pm$ 6.03	16.53 $\pm$ 4.35
CNK-89 (%)	94.3 $\pm$ 1.13	93.5 $\pm$ 1.39	92.43 $\pm$ 1.44	86.03 $\pm$ 1.66	69.57 $\pm$ 5.70	10.95 $\pm$ 5.04

B

BITC ( $\mu$ M)/ cell line	0	5	10	20
MDCK (%)	93.93 $\pm$ 2.29	92.47 $\pm$ 1.65	88.80 $\pm$ 2.76	81.07 $\pm$ 2.80
3T3 (%)	97.36 $\pm$ 0.76	96.3 $\pm$ 0.66	95.36 $\pm$ 1.47	93.76 $\pm$ 2.34

Table S1. Concentration-dependent cytotoxic effect on the canine cancer (A) and noncancerous cell lines (B). Percentage of living cells after 24 h incubation with benzyl isothiocyanate (BITC) were measured in flow cytometry after staining with propidium iodide (PI).

<b>BITC (<math>\mu\text{M}</math>)/ cell line</b>	<b>5 <math>\mu\text{M}</math></b>	<b>20 <math>\mu\text{M}</math></b>
<b>PBMCs (%)</b>	91.00 $\pm$ 11.14	39.16 $\pm$ 10.24
<b>CLBL-1 (%)</b>	28.14 $\pm$ 4.06	7.76 $\pm$ 3.71
<b>CLB70 (%)</b>	38.11 $\pm$ 9.97	9.65 $\pm$ 1.58
<b>GL-1 (%)</b>	86.44 $\pm$ 1.58	18.07 $\pm$ 5.32
<b>CNK-89 (%)</b>	91.23 $\pm$ 1.15	11.57 $\pm$ 5.24

Table S2. Comparison of the BITC effect on canine hematopoietic cancer cell lines and canine peripheral blood mononuclear cells(PBMCs) . Viability of cells after 24 h incubation with 5  $\mu\text{M}$  or 20  $\mu\text{M}$  BITC was measured in flow cytometry after staining with propidium iodide (PI). Percentage of living cells was defined in relations to untreated control cells.

CLB70	Control	z-VAD-fmk	NAC	BITC	BITC + z-VAD-fmk	BITC + NAC
AN+/PI- and AN+/PI+ (%)	11.33 ± 2.51	8.44 ± 2.97	12.41 ± 0.64	42.056 ± 7.44	11.61 ± 3.48	12.96 ± 1.47
AN-/PI+ (%)	1.41 ± 0.57	1.58 ± 0.68	1.19 ± 0.69	5.80 ± 2.62	2.87 ± 1.69	1.84 ± 0.17

CLBL-1	Control	z-VAD-fmk	NAC	BITC	BITC + z-VAD-fmk	BITC + NAC
AN+/PI- and AN+/PI+ (%)	6.62 ± 1.01	6.2 ± 1.10	5.94 ± 0.56	39.75 ± 7.25	21.94 ± 3.98	6.78 ± 0.32
AN-/PI+ (%)	1 ± 0.31	1.17 ± 0.27	0.76 ± 0.24	4.57 ± 1.85	4.74 ± 2.59	0.86 ± 0.10

Table S3. Percentage of apoptotic and necrotic CLB70 and CLBL-1 cells after 16 h incubation with BITC. Cells were stained with Annexin V-FITC/PI and the analysed in flow cytometry.

<b>BITC (4 <math>\mu</math>M) /cell line</b>	<b>Control</b>	<b>1.5h</b>	<b>3h</b>	<b>16h</b>
<b>CLB-70 (%)</b>	6.64 $\pm$ 1.76	7.26 $\pm$ 1.06	14.56 $\pm$ 3.55	35.77 $\pm$ 8.26
<b>CLBL-1 (%)</b>	7.28 $\pm$ 3.26	9.37 $\pm$ 2.95	18.09 $\pm$ 5.31	35.72 $\pm$ 2.76

Table S4. Percentage of cells with active caspase 3/7 after 1.5, 3 and 16 h incubation with BITC. Cells were stained with CellEvent®Caspase-3/7 Green Detection Reagent and SYTOX®AADvanced™ and analysed in flow cytometry.

	Control	BITC 4 $\mu$ M
<b>CLB70 (%)</b>	6.13 $\pm$ 3.46	25.77 $\pm$ 5.59
<b>CLBL-1 (%)</b>	4.13 $\pm$ 3.33	27.10 $\pm$ 3.73

Table S5. Percentage of cells with active caspase 8 after 16 h incubation with BITC. Cells were stained with FITC-IETD-fmk and analysed in flow cytometry.

<b>CLB70</b>	<b>BITC 0 <math>\mu</math>M</b>	<b>BITC 4 <math>\mu</math>M</b>
<b>Control (%)</b>	5.03 $\pm$ 2.20	35.77 $\pm$ 8.26
<b>z-VAD-fmk (%)</b>	3.84 $\pm$ 2.63	6.35 $\pm$ 3.56

<b>CLBL-1</b>	<b>BITC 0 <math>\mu</math>M</b>	<b>BITC 4 <math>\mu</math>M</b>
<b>Control (%)</b>	4.12 $\pm$ 1.44	35.72 $\pm$ 2.76
<b>z-VAD-fmk (%)</b>	3.30 $\pm$ 0.58	25.68 $\pm$ 3.07

Table S6. Percentage of cells with active caspase 3/7 16 h incubation with BITC with (z-VAD-fmk) or without (Control) pretreatment with pancaspase inhibitor. Cells were stained with CellEvent®Caspase-3/7 Green Detection Reagent and SYTOX®AADvanced™ and analysed in flow cytometry

<b>CLB70</b>	<b>Control</b>	<b>BITC 4 <math>\mu</math>M</b>	<b>BITC 6 <math>\mu</math>M</b>
<b>0.5 h</b>	100.00	144.36 $\pm$ 10.89	135.79 $\pm$ 18.20
<b>1.5 h</b>	100.00	108.69 $\pm$ 6.12	101.95 $\pm$ 8.43

<b>CLBL-1</b>	<b>Control</b>	<b>BITC 4 <math>\mu</math>M</b>	<b>BITC 6 <math>\mu</math>M</b>
<b>0.5h</b>	100.00	152.33 $\pm$ 13.40	147.32 $\pm$ 11.37
<b>1.5h</b>	100.00	119.02 $\pm$ 1.98	113.10 $\pm$ 16.93

Table S7. Increase (%) in ROS accumulation in CLB70 and CLBL-1 cells incubated with BITC for 0.5 and 1.5 h. Cells stained with 2',7'-Dichlorofluorescein Diacetate (DCF-DA) were analysed in flow cytometry. The fluorescence in untreated cells (Control) was defined as 100%.