Figure 1.

U2OS-cells were incubated with 10 µM 5-(and-6)-chloromethyl-2',7'-dichlorodihydrofluorescein diacetate for 1 h, then either methanol, 50 µM Resveratrol or extracts as indicated were added. After 1 h, 50 µM *tert*-butyl-hydroperoxide was added and after 20 min, cells were fixed by Hoechst and relative fluorescence (%) of 5-(and-6)-chloromethyl-2',7'-dichlorodihydrofluorescein (DCF) was measured with the Bioimager Pathway 855.

Figure 2.

CHO-NF-κB-GFP-cells (Affymetrix) were preincubated with medium or 1 % (v/v) methanol as a control, 20 mM *N*-acetylcysteine or 100 µM dexamethasone or the extracts as indicated for 4 h and then treated with 20 ng interleukine-1β/ml for 30 min. The cell nuclei were stained with Horchst and green fluorescence protein (GFP)-fluorescence was measured. Photographs: CHO-NF-κB-GFP-cells were preincubated with medium or 1 % methanol as a control, 20 mM N-acetylcysteine or extract L9 (1% v/v) for 4 h and then treated with 20 ng interleukine-1β/ml for 30 min. The cell nuclei were stained with Hoechst (lower panel) and the Hoechst- and GFP-fluorescence was measured. Fluorescence is shown in pseudocolours; green for EGFP-fluorescence and blue for Hoechst-fluorescence, the pictures above show a by-hand-magnification of the indicated fields. Scale marker bar = 50 µm for all photographs.

Figure 3. SH-SY5Y cells stably expressing glucocorticoid receptor-green fluorescent protein fusion protein (GR-EGFP) were left unstimulated in medium (control) or medium containing 1 % (v/v) methanol or cells were incubated with 100 nM dexamethasone (Dex) or the indicated molecules for 1 h. The cells were stained with Hoechst to allow a segmentation of nuclei and subsequently GFP-fluorescence in cytoplasm and nucleus. The ratio of cytoplasmic and nucleus GFP-fluorescence was calculated (nuc/cyto). Control values are set as 1 (Dex) and reduced values (no Dex) are set to 0. The assay was performed in duplicates with standard deviations indicated. Scale marker bar = 50 µm for all photographs.

The table summarizes effects of the isolated bendigoles towards several cell lines.

Photographs: The indicated cells stably expressing GR-EGFP were left unstimulated (control), or cells were incubated with 100 nM Dex or bendigole F for 1 h. The cell nuclei were stained with Hoechst (lower panel) and GFP- and HOECHST fluorescence was measured. Fluorescence is shown in pseudocolours; green for EGFP-fluorescence and blue for Hoechst-fluorescence, the pictures above show a by-hand-magnification of the indicated fields. Scale marker bar = 50 µm for all photographs.

Figure 4.

Schematic illustration of possible actions of bendigole F on the GR-and NF-κB pathway