## **Supplementary Figure Legends**

Supplementary Figure S1. The IKK2 inhibitor blocks EMT caused by IKK2-specific NF $\kappa$ B pathway activation. EpRas cells prevented from or induced to undergo EMT by TD-I $\kappa$ B $\alpha$  (**A**) or CA-IKK2 (**B**) were cultivated on porous supports in the presence (+) or absence (-) of TGF $\beta$  (5 ng/ml; days 2-7) and treated or not treated (control) with BI 5700 at the concentrations indicated. Cells were then immunostained for E-cadherin or Vimentin (red) as indicated, with DAPI counterstaining for DNA (blue). E-cadherin-negative/Vimentin-positive cells strongly expressing the CA-IKK2 transgene (insets in control – and + TGF $\beta$  panels) are indicated by GFP expression (green, see insets). Original magnification, x400. (**C**) Quantification of cells in mesenchymal structures as the percentage from >300 randomly chosen cells per filter in the presence or absence of TGF $\beta$  (light versus dark bars, respectively). At the indicated concentrations (in  $\mu$ M), the IKK2 inhibitor BI 5700 dose-dependently blocked EMT induced by either IKK2 or TGF $\beta$ .

Supplemental Figure S2. Inhibition of IKK2 causes reversal of constitutive EMT in mesenchymal colon carcinoma cells (CT26). CT26 cells were seeded into collagen gels and allowed to form structures for 2 days. BI 5700 was added or not added at day 2 at the concentrations indicated. At day 3, gels were treated (+) or not treated (-) with 5 ng/ml TGF $\beta$  for 6 further days. (A). Bright field photographs of the unordered clumps of untreated fibroblastoid cells and the compact cell balls formed by BI 5700-treated cells plus or minus TGF $\beta$ . (B). Confocal micrographs of cell structures from the gels depicted in (A) are shown. Untreated cells plus TGF $\beta$  show the expected, complete EMT-phenotype (high fibronectin, no E-cadherin; (25), while BI 5700-treated cells reverted to a epitheloid phenotype unaffected by TGF $\beta$  (no or little fibronectin, upregulation of cytoplasmic E-cadherin, comparable to effects obtained with TGF $\beta$ RII-inhibitor treatment; Ref. 25).

**Supplementary Figure S3. Pharmacokinetic analysis of BI 5700.** Time course of BI 5700 plasma concentration in mice after a single p.o. dose of 150 mg/kg (n=3).

**Supplementary Figure S4. Evaluation of metastases upon treatment with BI 5700.** (A) In the experimental set-up described in Figure 5, 14-15 serial sections (0.3 mm apart) through the lungs of control- and BI 5700-treated mice were evaluated by counting metastases in the sections grouped into 4 different size classes (top, see Materials and Methods). Numbers of small metastases showed no significant differences, but 2-3 fold fewer metastases of the two large size classes were observed in the BI 5700-treated mice. Significant differences revealed by Student's t-test are shown as P-values; NS= not significant. (B) Histological sections stained with H&E and photographed at low and high magnification (insets, red frame) are shown. 2-4 areas from the lungs of different animals have been mounted in the panels shown, to display the variability of metastatic sizes and histological appearance obtained. Dotted, black lines; outlines of typical metastases seen in control- and BI 5700-treated lungs.



Supplementary Fig. S1, Huber et al.



## Fibronectin/ E-Cadherin/ DNA

Supplementary Fig. S2, Huber et al.



Supplementary Fig. S3, Huber et al.



Supplementary Fig. S4, Huber et al.