

**Liste der geprüften Publikationen von Karl Lenhard Rudolph
Auswahl des Untersuchungsausschuss der Leibniz-Gemeinschaft**

1. **Ranganathan V**, Heine WF, Ciccone DN, Rudolph KL, Wu X, Chang S, Hai H, Ahearn IM, Livingston DM, Resnick I, Rosen F, Seemanova E, Jarolim P, DePinho RA, Weaver DT. Rescue of a telomere length defect of Nijmegen breakage syndrome cells requires NBS and telomerase catalytic subunit. *Curr Biol* **2001**; 11:962-6, Abb. 2B.
2. **Wirth T**, Kühnel F, Fleischmann-Mundt B, Woller N, Djojosebroto M, Rudolph KL, Manns M, Zender L, Kubicka S. Telomerase-dependent virotherapy overcomes resistance of hepatocellular carcinomas against chemotherapy and tumor necrosis factor-related apoptosis-inducing ligand by elimination of Mcl-1. *Cancer Res* **2005**; 65:7393-402, Abb. 3B und 3C.
3. **Jiang H**, Schiffer E, Song Z, Wang J, Züribig P, Thedieck K, Moes S, Bantel H, Saal N, Jantos J, Brecht M, Jenö P, Hall MN, Hager K, Manns MP, Hecker H, Ganser A, Döhner K, Bartke A, Meissner C, Mischak H, Ju Z, Rudolph KL. Proteins induced by telomere dysfunction and DNA damage represent biomarkers of human aging and disease. *Proc Natl Acad Sci U S A* **2008**; 105:11299-304, Abb. 3G.
4. **Wang J**, Sun Q, Morita Y, Jiang H, Gross A, Lechel A, Hildner K, Guachalla LM, Gompf A, Hartmann D, Schambach A, Wuestefeld T, Dauch D, Schrezenmeier H, Hofmann WK, Nakauchi H, Ju Z, Kestler HA, Zender L, Rudolph KL. A differentiation checkpoint limits hematopoietic stem cell self-renewal in response to DNA damage. *Cell* **2012**; 148:1001-14; Erratum zu Wang et al.: *Cell* 2014;158:1444, Abb. 3C und 4C.
5. **Schwitala S**, Ziegler PK, Horst D, Becker V, Kerle I, Begus-Nahrman Y, Lechel A, Rudolph KL, Langer R, Slotta-Huspenina J, Bader FG, Prazeres da Costa O, Neurath MF, Meining A, Kirchner T, Greten FR. Loss of p53 in enterocytes generates an inflammatory microenvironment enabling invasion and lymph node metastasis of carcinogen-induced colorectal tumors. *Cancer Cell* **2013**;23:93-106, 3C und 4C.
6. **Missios P**, Zhou Y, Guachalla LM, von Figura G, Wegner A, Chakkarappan SR, Binz T, Gompf A, Hartleben G, Burkhalter MD, Wulff V, Günes C, Sattler RW, Song Z, Illig T, Klaus S, Böhm BO, Wenz T, Hiller K, Rudolph KL. Glucose substitution prolongs maintenance of energy homeostasis and lifespan of telomere dysfunctional mice. *Nat Commun.* **2014**; 5:4924, Abb. 5E, Suppl. 5A, Suppl. 5B und Suppl. 5C.
7. **Wang J**, Lu X, Sakk V, Klein CA, Rudolph KL. Senescence and apoptosis block hematopoietic activation of quiescent hematopoietic stem cells with short telomeres. *Blood.* **2014** Nov 20;124(22):3237-40. doi: 10.1182/blood-2014-04-568055, Abb. 1C und 2C.
8. **Meena JK**, Cerutti A, Beichler C, Morita Y, Bruhn C, Kumar M, Kraus JM, Speicher MR, Wang ZQ, Kestler HA, d'Adda di Fagagna F, Günes C, Rudolph KL. Telomerase abrogates aneuploidy-induced telomere replication stress, senescence and cell depletion. *EMBO J.* **2015** May 12;34(10):1371-84, Abb. 2B und 1D.
9. **Tao S**, Tang D, Morita Y, Sperka T, Omrani O, Lechel A, Sakk V, Kraus J, Kestler HA, Kühl M, Rudolph KL. Wnt activity and basal niche position sensitize intestinal stem and progenitor cells to DNA damage. *EMBO J.* **2015** Mar 4;34(5):624-40, Abb. 1E und 1F.
10. **Hartmann K**, Illing A, Leithäuser F, Baisantry A, Quintanilla-Martinez L, Rudolph KL. Gene dosage reductions of Trf1 and/or Tin2 induce telomere DNA damage and lymphoma formation in aging mice. *Leukemia.* **2016** Mar;30(3):749-53, Abb. 1F.
11. **Wang J**, Morita Y, Han B, Niemann S, Löffler B, Rudolph KL. Per2 induction limits lymphoid-biased haematopoietic stem cells and lymphopoiesis in the context of DNA damage and ageing. *Nat Cell Biol.* **2016**;18:480-90, Abb. Suppl. 6.