**2024 Mayer-F Supplementary information**

**Table S1: Antibodies used for the study.** WB, Western blotting; IF, immunofluorescence staining, IHC, immunohistochemistry.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Antigen** | **WB dilution factor** | **IF dilution factor** | **IHC dilution factor** | **Company** | **Order number** |
| aquaporin 5, AQP5 |  | 100 |  | Merck/Sigma | A4979-200UL |
| ARH3 | 750 | 200 | 600 | Santa Cruz Biotechnology | sc-374162 |
| CD68 |  | 100 |  | Novus Biologicals | NB600-985 |
| PAR | 500 | 750 | 500 | ENZO | ALX-804-220-R100 |
| PARG | 500 | 2000 | 2000 | Biozol | MBS9131066-0.2 |
| PARP cleaved | 1000 |  | 100 | Cell signaling technology | 5625S |
| PARP1 | 1000 | 4000 | 4000 | Cell signaling technology | 9532s |
| PARP2 | 500 | 50 | 500 | Abcam | ab115620 /ABIN614936 |
| SFTPC |  | 60 |  | Santa Cruz Biotechnology | SC-7705 |
| TARG1, NDRG1 | 1000 | 600 | 300 | Hölzel diagnstika | USB-N2915-57 |

**Table S2. Quantification of PARP-1 band staining intensity of rat lung western blots after eIR.** Comparison to proteins from control animals (WB, western blot; MW, mean value; SD, standard deviation).

|  |  |  |  |
| --- | --- | --- | --- |
| **months after IR** | **C** | **2** | **3** |
| WB I | 100 | 0.01894053 | 0.07015504 |
| WB II | 100 | 0.30510204 | 0 |
| WB III | 100 | 0.41497585 | 0.15140845 |
| WB IV | 100 | 0.07717042 | 0.22394366 |
| WB V | 100 | 0.09354839 | 0.195 |
| WB VI | 100 | 0.32258065 | 0.645 |
| WB VII | 100 | 0.33133333 | 0.71100917 |
| WB VIII | 100 | 24.225 | 0.23548387 |
| MV | 100 | 3.2235814 | 0.27900002 |
| SD | 0 | 8.48707426 | 0.25920362 |
| T-test (p) |  | 7.1255E-09 | 1.462E-19 |
| ANOVA (p) |  |  | 4.9063E-16 |

**Table S3: Quantification of PARP-2 band staining intensity of rat lung western blots after eIR.** Comparison to proteins from control animals.

|  |  |  |  |
| --- | --- | --- | --- |
| **months after IR** | **C** | **2** | **3** |
| WB I | 100 | 57.2 | 96 |
| WB II | 100 | 124.94667 | 37.280612 |
| WB III | 100 | 50.240331 | 27.671605 |
| WB IV | 100 | 87.5 | 70.967742 |
| WBV | 100 | 247.47925 | 115.16228 |
| MV | 100 | 113.47325 | 69.416449 |
| SD | 0 | 72.012412 | 37.340049 |
| TTEST (p) |  | 0.7272523 | 0.140988 |
| ANOVA (p) |  |  | 0.3393081 |

**Table S4: Quantification of PARP-2 band staining intensity of western blots of rat lung after iIR.** Comparison to proteins from control animals.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **months after IR** | **Control** | **8,4 - 10,2 Gy** | **23 - 24 Gy** | **28 Gy** | **52 - 54 Gy** |
| WB 1 | 100 | 171.8552 | 109.5131 | 80.12208 | 28.05181 |
| WB 2 | 100 | 171.1378 | 93.96154 | 123.2947 | 81.06667 |
| Mean | 100 | 171.4965 | 101.7373 | 101.7084 | 54.55924 |
| SD | 0 | 0.507255 | 10.99661 | 30.52763 | 37.48717 |
| T-Test (p) |  | 0.003194 | 0.86006 | 0.949722 | 0.336186 |
| ANOVA (p) |  |  |  |  | 0.057065 |

**Figure S1. Immunofluorescence double-labelling of rat lungs at 3 months after irradiation with PARP-2 (A, C, D, F, G, I) and CD68 (B, C, E, F, H, I).** The stainings demonstrate many PARP-2-negative macrophages, but some macrophages display a slight granular positivity for PARP-2 (arrow). Bar corresponds to 50 µm.

P2 CD68 3 Mo abb cut.tif