

SUPPLEMENTARY MATERIALS

Repair mechanism	DNA damaging agent	Relevant processing enzyme/chemical inhibitor	Relevant genetic variants
BER	H ₂ O ₂	Fpg (NEB)	<i>Polβ</i> ^{-/-} , <i>Ogg1</i> ^{-/-}
BER	MMS	hAAG (NEB)	<i>Polβ</i> ^{-/-} , <i>Aag</i> ^{-/-} , <i>AagTg</i>
NER	UV	T4 endoV (NEB)	<i>XPG</i> ^{-/-} ,
NHEJ	IR	Scr7	<i>DNA-PKcs</i> mutant

Table S1. Repair pathways, DNA damaging agents, and relevant processing enzymes explored in this study.