***S. typh.* strain**	**Gene affected[1]**	**DNA repair[2]**	**LPS[3]**	**Biotin requirement[4]**	**Plasmids[5]**	**Mutational Event**	**Range of his$^+$ colonies[6]**
TA98	*hisD3052*	*uvrB*	*rfa*	*bio-*	pKM101	frameshift	15–60
TA100	*hisG46*	*uvrB*	*rfa*	*bio-*	pKM101	base-pair substitution	75–200
TA102	*hisG428*	-	*rfa*	*bio-*	pKM101, pAQ1	base-pair substitution	240–360
TA1535	*hisG46*	*uvrB*	*rfa*	*bio-*	-	base-pair substitution	3–37
TA1537	*hisC3076*	*uvrB*	*rfa*	*bio-*	-	frameshift	4–31

[1] Target genes in the different strains, leading to histidine requirement.

[2] *uvrB* - Deleted excision repair system, increasing the sensitivity.

[3] The *rfa* mutation changes the properties of the bacterial cell wall and results in partial loss of the lipopolysaccharide (LPS) barrier and increases the permeability of cells to certain types of chemicals. The *rfa* mutation is indicated by sensitivity to crystal violet.

[4] Requirement for biotin.

[5] pKM101, pAQ1– plasmids enhance sensitivity to special types of mutagens.

[6] Number of background colonies according Ref. [1].