## [５] 1,2−ジクロロエタン

| 試験系 | 試験方法 | 使用生物種・細胞株 | 試験結果 代謝活性化系 あり | 試験結果 代謝活性化系 なし | 文献番号 |
|---|---|---|---|---|---|
| in vitro | SOS 修復 | 細菌類 | − | − | 1 |
| | 大腸菌スポット試験 | 大腸菌 | | (+) | 2 |
| | 前進突然変異 | ネズミチフス菌 BA13 | + | * | 3 |
| | 復帰突然変異 | ネズミチフス菌 TA100 | + | + | 4 他 |
| | | | + | + | |
| | | | | (+) | 5 |
| | | | * | * | 6 他 |
| | | | * | * | |
| | | | * | * | |
| | | ネズミチフス菌 TA1530 | | (+) | 2 |
| | | ネズミチフス菌 TA1535 | + | + | 4 他 |
| | | | + | + | |
| | | | | (+) | 2 |
| | | | + | (+) | 7 |
| | | | + | * | 8 他 |
| | | | + | * | |
| | | | + | * | |
| | | | (+) | * | 9 |
| | | | * | * | 6 |
| | | ネズミチフス菌 TA1537 | * | * | 6 他 |
| | | | * | * | |
| | | | * | * | |
| | | ネズミチフス菌 TA1538 | | * | 2 |
| | | | * | * | 6 他 |
| | | | * | * | |
| | | ネズミチフス菌 TA98 | + | + | 4 |
| | | | * | * | 6 他 |
| | | | * | * | |
| | | | * | * | |
| | | ネズミチフス菌 TA1535 + GST (NM 5004) +SOS/ umuC" *lacZ* | | + | 10 |
| | | 大腸菌 K12 | * | * | 6 |
| | 遺伝子発現 | ネズミチフス菌 TA1535 + SOS/ umuC" lacZ | | + | 10 |
| | 遺伝子乗換え | 糸状菌 | | * | 11 |
| | 前進突然変異 | 放線菌 | | * | 9 |
| | | 糸状菌 | | * | 9 |
| | 染色体異数性 | 糸状菌 | | + | 11 |
| | DNA 修復 | マウス肝細胞 | | + | 4 |
| | 不定期 DNA 合成 | ラット肝細胞 | | + | 4 |
| | 遺伝子突然変異 | チャイニーズハムスター卵巣細胞 | + | + | 17 |
| | | | | + | 18 |
| | 染色体異数性 | ヒト AHH-1 細胞 | | * | 19 |
| | | ヒト MCL- 5 細胞 | | (+) | 19 |
| | | ヒト h2E1 細胞 | | * | 19 |
| | 細胞形質転換 | マウス細胞 | | * | 20 他 |
| | | | | * | |
| | | シリアンハムスター胚細胞 | | + | 21 |

| | | | | | |
|---|---|---|---|---|---|
| | 遺伝子突然変異 | ヒト EUE cells | | ＋ | 22 |
| | | ヒトリンパ芽球 | | ＋ | 23 |
| | DNA 付加物の形成 | 仔ウシ胸腺ＤＮＡ | ＋ | * | 24 |
| | | | ＋ | ＋ | 25 |
| | | マウス肝細胞 | | ＋ | 26 |
| in vivo | 染色体間の有糸分裂組換え | ショウジョウバエ | | ＋ | 12 |
| | 体細胞突然変異 | ショウジョウバエ | | ＋ | 13 他 |
| | | | | ＋ | |
| | | | | ＋ | |
| | 翅毛スポット試験 | ショウジョウバエ | | ＋ | 14 |
| | 前進突然変異 | ショウジョウバエ | | ＋ | 15 |
| | 伴性劣性突然変異 | ショウジョウバエ | | ＋ | 6 他 |
| | | | | ＋ | |
| | | | | ＋ | |
| | 染色体消失 | ショウジョウバエ | | (＋) | 16 |
| | | | | ＋ | 15 |
| | 小核誘発 | ヒト AHH-1 細胞 | | ＋ | 19 |
| | | ヒト MCL- 5 細胞 | | ＋ | 19 |
| | | ヒト h2E1 細胞 | | ＋ | 19 |
| | 復帰突然変異 | マウス、ネズミチフス菌 TA1535 | * | ＋ | 7 |
| | 宿主経由試験 | マウス、大腸菌 K12 | * | * | 6 |
| | DNA 一本鎖切断 | マウス肝細胞 | | ＋ | 27 |
| | | | * | ＋ | 28 |
| | | | | * | 27 |
| | DNA 傷害 | ラット肝細胞 | | ＋ | 29 |
| | マウススポット試験 | マウス | | * | 30 |
| | 姉妹染色分体交換 | マウス骨髄細胞 | | ＋ | 31 |
| | 小核誘発 | マウス骨髄細胞 | | * | 6 |
| | | マウス末梢血 | | * | 32 |
| | 優性致死 | マウス | | * | 33 |
| | DNA 付加物の形成 | ラット | | ＋ | 34 他 |
| | | | | ＋ | |
| | | マウス | | ＋ | 25 |
| | | マウス肝細胞 | | ＋ | 26 |
| | | ラット肝細胞 | | ＋ | 35 他 |
| | | | | ＋ | |
| | | | | ＋ | |
| | | | | ＋ | |
| | | | | ＋ | |
| | | マウス | | ＋ | 25 |
| 評価結果 | 上記のとおり、エームス試験、哺乳動物の培養細胞で遺伝子突然変異及び染色体異数性を認め、in vivo 試験系で小核誘発、染色体異常、DNA 傷害が認められたため、定量的なリスク評価を行う候補と考えられた。 | | | | |

注：1）＋ 陽性； (＋) 弱い陽性 ；－ 陰性； * 結論が出なかったもの
空欄；試験系がないか、試験されなかったもの

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