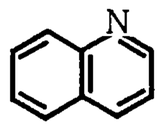
Quinoline (キノリン)

Chemical Name: Quinoline
Synonym
Molecular weight: 129.15
Melting point: -15℃
Boiling point: 237.7℃

Chemical Structure



CAS No : 91-22-5
MITI No : (5)-794
Source of Substance: Wako Pure Chemical Ind., Ltd.
Lot.No.: CTP5283
Purity: %
Vehicle: DMSO

Judgement for
Chromosomal Aberration in CHL: Positive

IARC Evaluation : not yet cited

Experimental Data

| | Treated Time (Hr) | Concentration (mg/ml) | No. of Metaphase | Polyploid (%) | Judge | Cell with Structural Chromosome Aberration (%) Gap | CTB | CTE | CSB | CSE | Total -G | Total +G | Judge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DMSO | 24 | | 200 | 0.5 | − | 0.5 | 0 | 0 | 0 | 0 | 0 | 0.5 | − |
| | 48 | | 200 | 0 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| Test Chemical | | | | | | | | | | | | | |
| | 24 | 0.10 | 200 | 2.0 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | | 0.20 | 200 | 2.0 | − | 0.5 | 0 | 0 | 0 | 0.5 | 0.5 | 1.0 | − |
| | | 0.40 | 200 | 0.5 | − | 0.5 | 0.5 | 1.5 | 0.5 | 0 | 2.0 | 2.5 | − |
| | | 0.60 | | | | No observation for metaphase | | | | | | | |
| | | 0.80 | | | | No observation for metaphase | | | | | | | |
| | 48 | 0.10 | 200 | 0.5 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | | 0.20 | 200 | 3.0 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | | 0.40 | 167 | 4.2 | − | 0.6 | 0.6 | 0.6 | 0 | 0 | 1.2 | 1.8 | − |
| | | 0.60 | | | | No observation for metaphase | | | | | | | |
| | | 0.80 | | | | | | | | | | | |
| Positive Control | | | | | | | | | | | | | |
| (MMC) | 24 | 0.00005 | 200 | 0 | − | 3.5 | 11.0 | 53.5 | 0 | 0 | 58.0 | 58.5 | + |
| | 48 | 0.00005 | 200 | 2.0 | − | 8.5 | 21.0 | 87.5 | 0 | 0 | 90.5 | 90.5 | + |

Experimental Data

| | S 9 with or without | Concentration (mg/ml) | No. of Metaphase | Polyploid (%) | Judge | Cell with Structural Chromosome Aberration (%) Gap | CTB | CTE | CSB | CSE | Total -G | Total +G | Judge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DMSO | − | | 200 | 2.0 | − | 0 | 0 | 0.5 | 0 | 0 | 0.5 | 0.5 | − |
| | + | | 200 | 1.0 | − | 0 | 0 | 0.5 | 0 | 0 | 0.5 | 0.5 | − |
| Test Chemical | | | | | | | | | | | | | |
| | − | 0.0075 | 200 | 1.5 | − | 0 | 0.5 | 0 | 0 | 0 | 0.5 | 0.5 | − |
| | | 0.015 | 200 | 0.5 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | | 0.030 | 200 | 1.0 | − | 0.5 | 0 | 0 | 0 | 0 | 0 | 0.5 | − |
| | | 0.045 | 200 | 2.5 | − | 0.5 | 0 | 0.5 | 0.5 | 0 | 0.5 | 1.0 | − |
| | | 0.060 | 200 | 2.5 | − | 0.5 | 0 | 1.0 | 0 | 0 | 1.0 | 1.5 | − |
| | + | 0.0075 | 200 | 1.0 | − | 0 | 0.5 | 0.5 | 0 | 0 | 1.0 | 1.0 | − |
| | | 0.015 | 200 | 1.5 | − | 0.5 | 0 | 3.5 | 0 | 0 | 3.5 | 4.0 | − |
| | | 0.030 | 200 | 1.0 | − | 2.0 | 6.5 | 29.5 | 0 | 0 | 31.0 | 31.5 | + |
| | | 0.045 | 200 | 3.0 | − | 4.0 | 8.0 | 47.0 | 0 | 1.5 | 49.5 | 50.5 | + |
| | | 0.060 | No observation for metaphase | | | | | | | | | | |
| Positive Control | | | | | | | | | | | | | |
| (B(a)P) | − | | 200 | 1.5 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | + | | 200 | 0 | − | 2.0 | 9.0 | 34.0 | 0 | 0 | 36.5 | 36.5 | + |