(2'-(2-クロロ-4,6-ジニトロフェニルアゾ)-5'-(ジエチルアミノ)アセトアニリド)

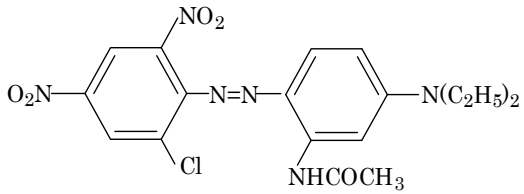
Experimental Data without Metabolic Activation-1

Chemical Name ; 2'-(2-Chloro-4,6-dinitrophenylazo)-5'-(diethylamino)acetanilide

Synoym ; Acetamide, *N*-[2-[(2-chloro-4,6-dinitrophenyl)azo]-5-(diethylamino)phenyl]-

Molecular Weight ; 434.84
Melting Point ; 183-184℃
Boiling Point ; －
Flashing Point ; －
Molecular Formula ; $C_{18}H_{19}ClN_6O_5$

Chemical Structure




CAS No. ; 66557-45-7
MITI No. ; (3)-3662
ML No. ; －
Specified Chemical Substances ; －

Source of Substance; －
Lot No. ; －
Purity ; 99.3%

Vehicle ; DMSO

| Treatment | | | No. of Metaphase | Polyploid | | Cell with Structural Chromosome Aberration (%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Substance | Time (h) | Concent-ration (mg/ml) | | (%) | Judge-ment | Gap | Chromatid | | Chromosom | | Others | Total | | Judge-ment |
| | | | | | | g | ctb | cte | csb | cse | | －g | ＋g | |
| DMSO | 24 | 1.0% | 200 | 1 | － | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | － |
| | 48 | 1.0% | 200 | 1 | － | 0.5 | 0.5 | 0.5 | 0 | 0 | 0 | 0.5 | 1 | － |
| Test Chemical | 24 | 0.0025 | 200 | 0.5 | － | 0 | 1 | 1.5 | 0 | 0 | 0 | 2.5 | 2.5 | － |
| | | 0.0050 | 200 | 1 | － | 0 | 0 | 0.5 | 0 | 0 | 0 | 0.5 | 0.5 | － |
| | | 0.010 | 200 | 1.5 | － | 0 | 0 | 0.5 | 0 | 0 | 0 | 0.5 | 0.5 | － |
| | | 0.020 | 150 | 0 | － | 0 | 0 | 0.7 | 0 | 0 | 0 | 0.7 | 0.7 | － |
| | | 0.030 | 96 | 0 | － | 1.0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.0 | － |
| | 48 | 0.0025 | 200 | 0.5 | － | 0 | 0 | 0.5 | 0 | 0.5 | 0 | 1 | 1 | － |
| | | 0.0050 | 200 | 0 | － | 0 | 0 | 0.5 | 0 | 0.5 | 0 | 1 | 1 | － |
| | | 0.010 | 200 | 1 | － | 0 | 0.5 | 1.5 | 0 | 0 | 0 | 1.5 | 1.5 | － |
| | | 0.020 | 115 | 0.9 | － | 0.9 | 0.9 | 0.9 | 0 | 0 | 0 | 1.7 | 2.6 | － |
| | | 0.030 | No obserbation for metaphase | | | | | | | | | | | |
| Positive Control [MMC] | 24 | 0.00004 | 200 | 0.5 | － | 1 | 10.5 | 36.5 | 0 | 0 | 0 | 42.5 | 43 | ＋ |
| | 48 | 0.00004 | 200 | 0.5 | － | 1.5 | 8 | 58.5 | 0 | 0.5 | 0 | 61 | 61.5 | ＋ |

※ The precipitation of test chemical was observed in the cultre medium over 0.01mg/ml.

Judgement for
Chromosomal Aberration in CHL ; Negative

IARC Evaluation ; not yet cited

Experimental Data without Metabolic Activation-2

| Treatment | | | No. of Metaphase | Polyploid | | Cell with Structural Chromosome Aberration (%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Substance | Time (h) | Concent-ration (mg/ml) | | (%) | Judge-ment | Gap | Chromatid | | Chromosom | | Others | Total | | Judge-ment |
| | | | | | | g | ctb | cte | csb | cse | | −g | +g | |
| DMSO | 28-20* | 1.0% | 200 | 1.5 | − | 0.5 | 1 | 0.5 | 0.5 | 0 | 0 | 1.5 | 1.5 | − |
| Test Chemical | 28-20* | 0.0013 | 200 | 0.5 | − | 0 | 1 | 0.5 | 0 | 0 | 0 | 1.5 | 1.5 | − |
| | | 0.0025 | 200 | 1 | − | 0 | 0 | 1.5 | 0 | 0 | 0 | 1.5 | 1.5 | − |
| | | 0.0050 | 200 | 1.5 | − | 0.5 | 0.5 | 0 | 0 | 0.5 | 0 | 1 | 1.5 | − |
| | | 0.010 | 200 | 0 | − | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | − |
| | | 0.020 | 200 | 4 | − | 0 | 0 | 1.5 | 0 | 0 | 0 | 1.5 | 1.5 | − |
| | | 0.030 | 155 | 1.3 | − | 1.3 | 0 | 1.9 | 0 | 0 | 0 | 1.9 | 3.2 | − |
| Positive Control [MMC] | 48-0 | 0.00004 | 200 | 0.5 | − | 0.5 | 13.5 | 51.5 | 0.5 | 1 | 0 | 56.5 | 57 | + |

* Test conditions: Treatment time ; 28h, Rcovery time ; 20h

※ The precipitation of test chemical was observed in the cultre medium over 0.01mg/ml.

Experimental Data with Metabolic Activation

| Treatment | | | No. of Metaphase | Polyploid | | Cell with Structural Chromosome Aberration (%) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Substance | S9 mix | Concent-ration (mg/ml) | | (%) | Judge-ment | Gap | Chromatid | | Chromosom | | Others | Total | | Judge-ment |
| | | | | | | g | ctb | cte | csb | cse | | −g | +g | |
| DMSO | − | 1.0% | 200 | 1 | − | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | − |
| | + | 1.0% | 200 | 0 | − | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | − |
| Test Chemical | − | 0.010 | 200 | 0 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | | 0.020 | 200 | 0.5 | − | 0 | 0.5 | 0.5 | 0 | 0 | 0 | 1 | 1 | − |
| | | 0.040 | 200 | 0.5 | − | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | − |
| | | 0.080 | 200 | 1.5 | − | 0 | 0.5 | 0 | 0 | 0 | 0 | 0.5 | 0.5 | − |
| | | 0.16 | 200 | 1 | − | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 2 | − |
| | | 0.32 | 200 | 1.5 | − | 0 | 2 | 1.5 | 0 | 0 | 0 | 3.5 | 3.5 | − |
| | + | 0.010 | 200 | 0.5 | − | 0 | 0 | 0.5 | 0 | 0 | 0 | 0.5 | 0.5 | − |
| | | 0.020 | 200 | 1 | − | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | − |
| | | 0.040 | 200 | 2.5 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | | 0.080 | 200 | 1 | − | 0 | 0.5 | 1 | 0 | 0 | 0 | 1 | 1 | − |
| | | 0.16 | 200 | 1.5 | − | 0 | 0 | 0.5 | 0 | 0 | 0 | 0.5 | 0.5 | − |
| | | 0.32 | 200 | 1.5 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| Positive Control [B[a]P] | − | 0.01 | 200 | 0 | − | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | − |
| | + | 0.01 | 200 | 0.5 | − | 1.5 | 0 | 48.5 | 6 | 0.5 | 0 | 51.5 | 52 | + |

※ Test conditions: Treatment time ; 6h, Rcovery time ; 18h

※ The precipitation of test chemical was observed in the cultre medium of all concetration.