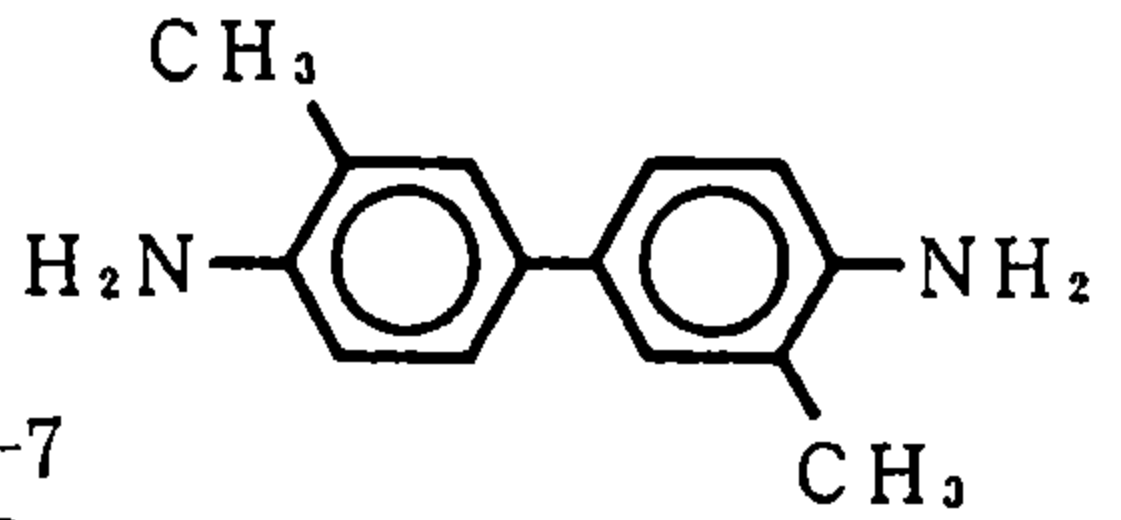


**3,3'-Dimethyl-4,4'-diaminobiphenyl**  
 (3,3'-ジメチル-4,4'-ジアミノビフェニル)

**Chemical Name:** 3,3'-Dimethyl-4,4'-diaminobiphenyl  
**Synonym:** o-Tolidine  
 3,3-Dimethylbenzidine  
 3,3'-Dimethyl-(1,1'-biphenyl)-4,4'-diamine  
**Molecular weight:** 212.3  
**Melting point:** 129 - 130 °C  
**Boiling point:**  
**Chemical Structure**  
  
**CAS No :** 119-93-7  
**MITI No:** (9)-882  
**Specified chemical substances:** G 1  
**Source of Substance:** Sigma  
**Lot. No. :** 56F-5031  
**Purity:**  
**Vehicle:** DMSO

**Experimental Data**

| Con.<br>μg/<br>plate  | Riboflavin free |             |               |
|-----------------------|-----------------|-------------|---------------|
|                       | TA100<br>S9+    | TA98<br>S9+ | TA1537<br>S9+ |
| DMSO                  | ( 152 )         | ( 15 )      | ( 10 )        |
| 0.5                   | 150             | 19          | 9             |
|                       | 160             | 28          | 10            |
|                       | ( 155 )         | ( 24 )      | ( 10 )        |
|                       | 164             | 38          | 11            |
| 1                     | 177             | 40          | 9             |
|                       | ( 171 )         | ( 39 )      | ( 10 )        |
|                       | 161             | 87          | 10            |
|                       | 171             | 63          | 13            |
| 5                     | ( 166 )         | ( 75 )      | ( 12 )        |
|                       | 184             | 100         | 13            |
|                       | 198             | 132         | 14            |
|                       | ( 191 )         | ( 116 )     | ( 14 )        |
| 10                    | 216             | 213         | 15            |
|                       | 201             | 165         | 10            |
|                       | ( 209 )         | ( 189 )     | ( 13 )        |
|                       | 222             | 234         | 7             |
| 50                    | 250             | 216         | 12            |
|                       | ( 236 )         | ( 225 )     | ( 10 )        |
|                       | 228             | 315         | 13            |
|                       | 204             | 306         | 10            |
| 100                   | ( 216 )         | ( 311 )     | ( 12 )        |
|                       | 108             | 317         | 5             |
|                       | 204             | 246         | 7             |
|                       | ( 216 )         | ( 282 )     | ( 6 )         |
| 500                   | 108             | 108         | 108           |
|                       | 97              | 97          | 97            |
|                       | ( 103 )         | ( 103 )     | ( 103 )       |
|                       | 108             | 108         | 108           |
| 1000                  | 108             | 108         | 108           |
|                       | 97              | 97          | 97            |
|                       | ( 103 )         | ( 103 )     | ( 103 )       |
|                       | 108             | 108         | 108           |
| 5000                  | 108             | 108         | 108           |
|                       | 97              | 97          | 97            |
|                       | ( 103 )         | ( 103 )     | ( 103 )       |
|                       | 108             | 108         | 108           |
| Judgement             | -               | +           | -             |
| Specific Mutagenicity |                 | 24000       |               |
| Positive              | 2AA             | 2AA         | 2AA           |
| Control               | (1160)          | (242)       | (197)         |

**Mutagenicity**  
 in Bacterial Test : Positive

IARC Overall Evaluation : G 2 B