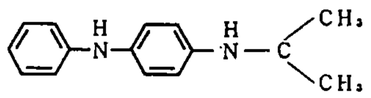
N-Phenyl-N'-isopropyl-p-phenylenediamine
(N-フェニル-N'-イソプロピル-p-フェニレンジアミン)

Chemical Name: N-Phenyl-N'-isopropyl-p-phenylenediamine
Synonym: Phenylisopropyl-p-phenylendiamine
N-(1-Methylethyl)-N'-phenyl-1,4-benzenediamine
N-Isopropyl-N'-phenyl-1,4-phenylenediamine
Molecular weight: 226.32
Melting point: 70℃
Boiling point: ℃

Chemical Structure



CAS No: 101-72-4
MITI No: (3)-368

Source of Substance: Tokyo Kasei Kogyo Co. Ltd
Lot. No. : AT01
Purity: chemical grade
Vehicle: DMSO

Mutagenicity in Bacterial Test: Negative
IARC Evaluation: not yet cited

Experimental Data

Number of Revertants/plate

Con. μg/plate	Base-substitution						Frame-shift					
	TA100		TA1535		WP2uvrA		TA98		TA1537		TA1538	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	(96)	( )	(19)	( )	(41)	( )	(20)	( )	(10)	( )	(13)	( )
	101		23		36		18		7		12	
	106		29		42		21		5		13	
1	(104)	( )	(26)	( )	(39)	( )	(20)	( )	(6)	( )	(13)	( )
	97		22		32		16		9		10	
	118		15		41		25		4		19	
2	(108)	( )	(19)	( )	(37)	( )	(21)	( )	(7)	( )	(15)	( )
	118		16		48		26		12		10	
	121		10		35		19		5		13	
5	(120)	( )	(13)	( )	(42)	( )	(23)	( )	(9)	( )	(12)	( )
	102		18		36		22		8		11	
	108		10		37		30		9		13	
10	(105)	( )	(14)	( )	(37)	( )	(26)	( )	(9)	( )	(12)	( )
	101		12		31		24		11		12	
	96		22		38		29		10		10	
20	(99)	( )	(17)	( )	(35)	( )	(27)	( )	(11)	( )	(11)	( )
	108		18		42		21		9		11	
	97		10		40		25		7		9	
50	(103)	( )	(14)	( )	(41)	( )	(23)	( )	(8)	( )	(10)	( )
	0*		19		35		0*		0*		10	
	0*		12		39		0*		0*		14	
100	(0*)	( )	(16)	( )	(37)	( )	(0*)	( )	(0*)	( )	(12)	( )
	0*		0*		0*		0*		0*		0*	
	0*		0*		0*		0*		0*		0*	
200	(0*)	( )	(0*)	( )	(0*)	( )	(0*)	( )	(0*)	( )	(0*)	( )
Judgement	—		—		—		—		—		—	
Specific Mutagenicity												
Positive Control	AF2	2AA 0.5	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA	2NF	2AA
	(383)	( )	(217)	( )	(206)	( )	(334)	( )	(509)	( )	(314)	( )

Experimental Data

Con. μg/plate	Number of Revertants/plate											
	Base-substitution						Frame-shift					
	TA100		TA1535		WP2uvrA		TA98		TA1537		TA1538	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	( )	(116)	( )	( )	( )	(41)	( )	( )	( )	(12)	( )	(19)
		111				27				8		17
		104				49				13		15
5	( )	(108)	( )	( )	( )	(38)	( )	( )	( )	(11)	( )	(16)
		105				31				9		20
		104				44				10		14
10	( )	(105)	( )	( )	( )	(38)	( )	( )	( )	(10)	( )	(17)
		105				46				13		21
		109				46				13		15
20	( )	(107)	( )	( )	( )	(46)	( )	( )	( )	(13)	( )	(18)
		122				51				8		19
		104				30				10		15
50	( )	(113)	( )	( )	( )	(41)	( )	( )	( )	(9)	( )	(17)
		110				36				15		20
		104				46				9		13
100	( )	(107)	( )	( )	( )	(41)	( )	( )	( )	(12)	( )	(17)
		106				43				7		29
		102				35				11		26
200	( )	(104)	( )	( )	( )	(39)	( )	( )	( )	(9)	( )	(28)
		41*				37				4		7*
		44*				38				6		9*
500	( )	(43*)	( )	( )	( )	(38)	( )	( )	( )	(5)	( )	(8*)
		0*				10*				0*		0*
		0*				17*				0*		0*
1000	( )	(0*)	( )	( )	( )	(14*)	( )	( )	( )	(0*)	( )	(0*)
Judgement		—				—				—		—
Specific Mutagenicity												
Positive Control	AF2	2AA 0.5	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA	2NF	2AA
	( )	(451)	( )	( )	( )	(950)	( )	( )	( )	(433)	( )	(430)

Experimental Data

Con. μg/plate	Number of Revertants/plate											
	Base-substitution						Frame-shift					
	TA100		TA1535		WP2uvrA		TA98		TA1537		TA1538	
	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+	S9-	S9+
DMSO	( )	( )	( )	(17)	( )	( )	( )	(30)	( )	( )	( )	( )
				18				33				
2	( )	( )	( )	(14)	( )	( )	( )	(28)	( )	( )	( )	( )
				10				23				
5	( )	( )	( )	(19)	( )	( )	( )	(22)	( )	( )	( )	( )
				19				22				
10	( )	( )	( )	(13)	( )	( )	( )	(32)	( )	( )	( )	( )
				11				34				
20	( )	( )	( )	(18)	( )	( )	( )	(25)	( )	( )	( )	( )
				15				29				
50	( )	( )	( )	(15)	( )	( )	( )	(22)	( )	( )	( )	( )
				16				23				
100	( )	( )	( )	(17)	( )	( )	( )	(11*)	( )	( )	( )	( )
				15				12*				
200	( )	( )	( )	(0*)	( )	( )	( )	(0*)	( )	( )	( )	( )
				18				10*				
500	( )	( )	( )	(0*)	( )	( )	( )	(0*)	( )	( )	( )	( )
				0*				0*				
				0*				0*				
				0*				0*				
Judgement				—				—				
Specific Mutagenicity												
Positive Control	AF2	2AA 0.5	NaN_3	2AA	AF2	2AA	AF2	2AA	9AA	2AA	2NF	2AA
	( )	( )	( )	(185)	( )	( )	( )	(434)	( )	( )	( )	( )