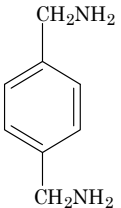


Chemical Name ; *p*-Xylenediamine

Synonym ; *p*-Xylylenediamine  
*p*-Bis(aminomethyl)benzene  
 1,4-Benzenedimethanamine  
*α, α'*-Diamino-*p*-xylene  
*p*-キシレンジアミン  
 1,4-ビス(アミノメチル)ベンゼン  
 1,4-ベンゼンジメタナミン

Molecular Weight ; 136.2  
 Melting Point ; 62-64°C [Aldrich]  
 Boiling Point ; 230°C(10mmHg)[Aldrich]  
 Flashing Point ; -  
 Molecular Formula ; C<sub>8</sub>H<sub>12</sub>N<sub>2</sub>

Chemical Structure



CAS No. ; 539-48-0  
 MITI No. ; -  
 ML No. ; -  
 Specified Chemical Substances ; -

Source of Substance; Tokyo Kasei Kogyo Co., Ltd.  
 Lot No. ; FBX01  
 Purity ; 99.5%

Vehicle ; DMSO

Substance	Treatment		No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)									
	Time (h)	Concentration (mg/ml)		%	Judgement	Chromosome					Total		Judgement		
						Gap	Chromatid	Chromosome	Others	-g	+g				
						g	ctb	cte	csb	cse					
DMSO	24	0.5%	200	0	-	0.5	0	0	0	0	0	0	0.5	-	
	48	0.5%	200	0	-	0.5	0	0	0	0	0	0	0.5	-	
Test Chemical	24	0.015	200	0	-	0	0	0.5	0	0	0	0	0.5	0.5	-
		0.03	200	2	-	0	0.5	0.5	0	0	0	0	1	1	-
		0.06	200	0	-	0	0.5	0	0	0	0	0	0.5	0.5	-
		0.09	200	1.5	-	0	1	0	0	0	0	0	1	1	-
		0.12	128	1.6	-	0	0	0	0	0	0	0	0	0	-
		0.15	No obserbation for metaphase												
	48	0.015	200	0.5	-	0	0.5	0.5	0	0	0	0	0.5	0.5	-
		0.03	200	0.5	-	0	0	0	0	0.5	0	0	0.5	0.5	-
		0.06	200	0	-	0.5	0.5	0.5	0	0	0	0	1	1.5	-
		0.09	200	3	-	0	0	0.5	0	0.5	0	0	1	1	-
		0.12	163	0.6	-	0	0	0	0	0	0	0	0	0	-
		0.15	No obserbation for metaphase												
Positive Control [MMC]	24	0.00004	200	0.5	-	2	9	15	0	0	0	23.5	25.5	+	
	48	0.00004	200	0.5	-	1	7	18.5	0	0	0	23.5	24	+	

Judgement for Chromosomal Aberration in CHL ; Negative

IARC Evaluation ; not yet cited

Experimental Data with Metabolic Activation

(C9606-2/2)

Treatment			No. of Metaphase	Polyploid		Cell with Structural Chromosome Aberration (%)									
Substance	S9 mix	Concent- ration (mg/ml)		(%)	Judge- ment	Gap g	Chromatid			Chromosome		Others	Total		Judge- ment
							ctb	cte	csb	cse	-g		+g		
DMSO	-	0.5%	200	0	-	0	0	0	0	0	0	0	0	0	-
	+	0.5%	200	0	-	0	0	0	0	0	0	0	0	0	-
Test Chemical	-	0.05	200	0	-	0	0	0	0	0	0	0	0	0	-
		0.1	200	1	-	0	0	1	0	0	0	1	1	-	
		0.2	200	2	-	0	0.5	0	0	0	0	0.5	0.5	-	
		0.3	No obserbation for metaphase												
		0.4	No obserbation for metaphase												
	+	0.05	200	0	-	0	0	0	0	0	0	0	0	0	-
		0.1	200	0	-	0	0	0	0	0	0	0	0	0	-
		0.2	200	0.5	-	0	0	0	0	0	0	0	0	0	-
		0.3	200	0	-	0	0.5	0.5	0	0	0	0.5	0.5	-	
		0.4	189	1.1	-	0.5	1.6	1.1	0	0	0	2.6	3.2	-	
Positive Control [B[a]P]	-	0.01	200	1	-	0	0	0.5	0	0	0	0.5	0.5	-	
	+	0.01	200	0.5	-	0.5	8	28.5	0	0.5	0	31.5	32	+	

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