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Antagonist; AntCT 4-3

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0092	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	4
	$4.00 \times 10^{+1}$	4
	8.00×10^0	1
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1
H0093	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	1
	$4.00 \times 10^{+1}$	1
	8.00×10^0	1
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1

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Antagonist; AntCT 4-4

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0095	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	4
	$4.00 \times 10^{+1}$	1
	8.00×10^0	1
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1
	H0096	$1.00 \times 10^{+3}$
$2.00 \times 10^{+2}$		4
$4.00 \times 10^{+1}$		4
8.00×10^0		1
1.60×10^0		1
3.20×10^{-1}		1
6.40×10^{-2}		1
1.28×10^{-2}		1
2.56×10^{-3}		1
5.12×10^{-4}		1
1.02×10^{-4}		1

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Antagonist; AntCT 5-1(Fail)

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0097-1	$1.00 \times 10^{+2}$	1
	$5.00 \times 10^{+1}$	1
	$2.50 \times 10^{+1}$	1
	$1.25 \times 10^{+1}$	1
	6.25×10^0	1
	3.13×10^0	1
	1.56×10^0	1
	7.81×10^{-1}	1
	3.91×10^{-1}	1
	1.95×10^{-1}	1
	9.77×10^{-2}	1
H0099-1	$1.00 \times 10^{+2}$	1
	$5.00 \times 10^{+1}$	1
	$2.50 \times 10^{+1}$	1
	$1.25 \times 10^{+1}$	1
	6.25×10^0	1
	3.13×10^0	1
	1.56×10^0	1
	7.81×10^{-1}	1
	3.91×10^{-1}	1
	1.95×10^{-1}	1
	9.77×10^{-2}	1

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Antagonist; AntCT 5-2(Fail)

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0100-1	$1.00 \times 10^{+3}$	1
	$5.00 \times 10^{+2}$	1
	$2.50 \times 10^{+2}$	1
	$1.25 \times 10^{+2}$	1
	$6.25 \times 10^{+1}$	1
	$3.13 \times 10^{+1}$	1
	$1.56 \times 10^{+1}$	1
	7.81×10^0	1
	3.91×10^0	1
	1.95×10^0	1
	9.77×10^{-1}	1
H0102-1	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	4
	$4.00 \times 10^{+1}$	4
	8.00×10^0	2
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1

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Antagonist; AntCT 5-3(Fail)

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0103-1	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	4
	$4.00 \times 10^{+1}$	4
	8.00×10^0	3
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1
H0104-1	$1.00 \times 10^{+3}$	4
	$5.00 \times 10^{+2}$	1
	$2.50 \times 10^{+2}$	1
	$1.25 \times 10^{+2}$	1
	$6.25 \times 10^{+1}$	1
	$3.13 \times 10^{+1}$	1
	$1.56 \times 10^{+1}$	1
	7.81×10^0	1
	3.91×10^0	1
	1.95×10^0	1
	9.77×10^{-1}	1

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Antagonist; AntCT 5-4(Fail)

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0105-1	$1.00 \times 10^{+3}$	1
	$2.00 \times 10^{+2}$	1
	$4.00 \times 10^{+1}$	1
	8.00×10^0	1
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1
H0106-1	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	1
	$4.00 \times 10^{+1}$	1
	8.00×10^0	1
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1

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Antagonist; Retest AntCT 5-1

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0097-2	$1.00 \times 10^{+2}$	1
	$5.00 \times 10^{+1}$	1
	$2.50 \times 10^{+1}$	1
	$1.25 \times 10^{+1}$	1
	6.25×10^0	1
	3.13×10^0	1
	1.56×10^0	1
	7.81×10^{-1}	1
	3.91×10^{-1}	1
	1.95×10^{-1}	1
	9.77×10^{-2}	1
H0099-2	$1.00 \times 10^{+2}$	1
	$5.00 \times 10^{+1}$	1
	$2.50 \times 10^{+1}$	1
	$1.25 \times 10^{+1}$	1
	6.25×10^0	1
	3.13×10^0	1
	1.56×10^0	1
	7.81×10^{-1}	1
	3.91×10^{-1}	1
	1.95×10^{-1}	1
	9.77×10^{-2}	1

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Antagonist; Retest AntCT 5-2

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0100-2	$1.00 \times 10^{+3}$	1
	$5.00 \times 10^{+2}$	1
	$2.50 \times 10^{+2}$	1
	$1.25 \times 10^{+2}$	1
	$6.25 \times 10^{+1}$	1
	$3.13 \times 10^{+1}$	1
	$1.56 \times 10^{+1}$	1
	7.81×10^0	1
	3.91×10^0	1
	1.95×10^0	1
	9.77×10^{-1}	1
H0102-2	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	4
	$4.00 \times 10^{+1}$	4
	8.00×10^0	2
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1

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Antagonist; Retest AntCT 5-3

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0103-2	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	4
	$4.00 \times 10^{+1}$	4
	8.00×10^0	3
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1
H0104-2	$1.00 \times 10^{+3}$	4
	$5.00 \times 10^{+2}$	1
	$2.50 \times 10^{+2}$	1
	$1.25 \times 10^{+2}$	1
	$6.25 \times 10^{+1}$	1
	$3.13 \times 10^{+1}$	1
	$1.56 \times 10^{+1}$	1
	7.81×10^0	1
	3.91×10^0	1
	1.95×10^0	1
	9.77×10^{-1}	1

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Antagonist; Retest AntCT 5-4

Substance Code	Concentrations Tested (Final) ($\mu\text{g/ml}$)	Cell Viability Results
H0105-2	$1.00 \times 10^{+3}$	1
	$2.00 \times 10^{+2}$	1
	$4.00 \times 10^{+1}$	1
	8.00×10^0	1
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1
H0106-2	$1.00 \times 10^{+3}$	4
	$2.00 \times 10^{+2}$	1
	$4.00 \times 10^{+1}$	1
	8.00×10^0	1
	1.60×10^0	1
	3.20×10^{-1}	1
	6.40×10^{-2}	1
	1.28×10^{-2}	1
	2.56×10^{-3}	1
	5.12×10^{-4}	1
	1.02×10^{-4}	1

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Table 6.1 Summary of Experiments Template: Comprehensive Testing

Experiments: Phase III Comprehensive Testing; Agonist							
Experiment I.D.	Substance Code	Date	Plate Induction	EC ₅₀ (µg/mL)	Experiment Used for Data Analysis or Repeated?	Rationale for Unacceptability	
AgCT 1-1	H0025-1	04-Jun-09	5.4	-	Repeated	Fail ¹	
	H0026-1			-	Repeated	Fail ¹	
AgCT 1-2	H0027-1		4.4	-	Repeated	Fail ¹	
	H0028-1			-	Repeated	Fail ¹	
AgCT 1-3	H0029-1		4.6	-	Repeated	Fail ¹	
	H0030-1			-	Repeated	Fail ¹	
AgCT 1-4	H0031-1		4.6	-	Repeated	Fail ¹	
	H0032-1			-	Repeated	Fail ¹	
AgCT 1-5	H0025-2		12-Aug-09	4.4	Negative ²	Used	Acceptable
	H0026-2				3.1 ²	Used	Acceptable
AgCT 1-6	H0027-2	4.3		2.1 ²	Used	Acceptable	
	H0028-2			3.4x10 ⁻⁶	Used	Acceptable	
AgCT 1-7	H0029-2	4.3		Negative ²	Used	Acceptable	
	H0030-2			24 ²	Used	Acceptable	
AgCT 1-8	H0031-2	4.0		Negative ²	Repeated ³	Retest	
	H0032-2			0.86 ²	Used	Acceptable	
AgCT 2-1	H0033-1	17-Jul-09		3.9	0.0025	Repeated ³	Retest
	H0034-1				6.7x10 ⁻⁶	Repeated ³	Retest
AgCT 2-2	H0035		4.6	0.55	Used	Acceptable	
	H0036			0.068	Used	Acceptable	
AgCT 2-3	H0037-1		4.2	Positive ⁴	Repeated ³	Retest	
	H0038-1			0.20	Repeated ³	Retest	
AgCT 2-4	H0039		4.0	8.2x10 ⁻⁵	Used	Acceptable	
	H0040-1			0.26	Repeated ³	Retest	
AgCT 3-1	H0041-1		25-Jul-09	4.5	Negative	Repeated ³	Retest
	H0042-1				0.00078	Repeated ³	Retest
AgCT 3-2	H0043	4.4		Negative	Used	Acceptable	
	H0044-1			5.1	Repeated ³	Retest	
AgCT 3-3	H0045	4.8	0.39	Used	Acceptable		

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Experiments: Phase III Comprehensive Testing; Agonist							
Experiment I.D.	Substance Code	Date	Plate Induction	EC ₅₀ (µg/mL)	Experiment Used for Data Analysis or Repeated?	Rationale for Unacceptability	
	H0046			0.096	Used	Acceptable	
AgCT 3-4	H0047		4.5	Negative	Used	Acceptable	
	H0048			Negative ²	Used	Acceptable	
AgCT 4-1	H0049-1	01-Aug-09	4.9	Positive ²⁵	Repeated ³	Retest	
	H0050			9.0x10 ⁻⁷	Used	Acceptable	
AgCT 4-2	H0051-1		5.0	0.00029	Repeated ³	Retest	
	H0053			Positive ⁶	Used	Acceptable	
AgCT 4-3	H0054		5.1	0.17	Used	Acceptable	
	H0055			10 ²	Used	Acceptable	
AgCT 4-4	H0056		3.8	0.0014	Used	Acceptable	
	H0057			Negative	Used	Acceptable	
AgCT 5-1	H0058		08-Aug-09	4.2	Positive ²⁷	Used	Acceptable
	H0059				Negative ²	Used	Acceptable
AgCT 5-2	H0060	3.9		1.9 ²	Used	Acceptable	
	H0061-1			1.3 ²	Repeated ³	Retest	
AgCT 5-3	H0062-1	4.6		3.8	Repeated ³	Retest	
	H0063			2.3 ²	Used	Acceptable	
AgCT 5-4	H0064	4.6		230 ²	Used	Acceptable	
	H0065-1			Positive ²⁸	Repeated ³	Retest	
Retest	H0033-2	28-Aug-09		7.4	0.00013	Used	Acceptable
AgCT 1-1	H0037-2				0.15	Used	Acceptable
Retest	H0038-2			6.8	0.00013	Used	Acceptable
AgCT 1-2	H0042-2				4.9x10 ⁻⁵	Used	Acceptable
Retest	H0044-2		6.7	0.021	Used	Acceptable	
AgCT 1-3	H0051-2			Negative	Repeated ³	Retest	
Retest	H0061-2		5.9	0.021	Used	Acceptable	
AgCT 1-4	H0062-2			2.6	Used	Acceptable	
Retest	H0031-3		12-Sep-09	6.1	3.9 ²	Repeated ³	Retest
AgCT 2-1	H0049-2				0.019 ²	Used	Acceptable
Retest	H0031-4	09-Oct-09	4.4	Positive ²⁹	Used	Acceptable	

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Experiments: Phase III Comprehensive Testing; Agonist						
Experiment I.D.	Substance Code	Date	Plate Induction	EC ₅₀ (µg/mL)	Experiment Used for Data Analysis or Repeated?	Rationale for Unacceptability
AgCT 3-1	H0034-2	03-Nov-09	4.5	Negative ²	Used	Acceptable
Retest	H0040-2			0.19 ²	Used	Acceptable
AgCT 3-2	H0041-2			Negative ²	Used	Acceptable
Retest	H0051-3		5.0	Negative	Used	Acceptable
AgCT 3-3	H0065-2			0.025 ²	Used	Acceptable
Retest	H0034-3		4.6	Negative ²	Used	Acceptable
AgCT 4-1	-	-		-	-	

NA = Not applicable, EC₅₀ values are not calculated for substances tested on plates not meeting acceptance criteria.

¹The reason for the failure is because Methoxchlor did not meet acceptance criteria

²Deleted some points for calculating EC₅₀. The deleted points are shown in Figure 3.

³The tests were repeated with different concentration due to incorrect ranges.

⁴Positive for agonism at $5.0 \times 10^{+1} \sim 9.77 \times 10^{-2} \mu\text{g/mL}$

⁵Positive for agonism at $1.25 \times 10^0 \sim 9.77 \times 10^{-3} \mu\text{g/mL}$

⁶Positive for agonism at $1.00 \times 10^{+1} \sim 2.50 \times 10^0 \mu\text{g/mL}$

⁷Positive for agonism at $8.00 \times 10^0 \mu\text{g/mL}$

⁸Positive for agonism at $6.25 \times 10^{-1} \sim 9.77 \times 10^{-3} \mu\text{g/mL}$

⁹Positive for agonism at $2.00 \times 10^{+1} \sim 4.00 \times 10^0 \mu\text{g/mL}$

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Table 6.2 Summary of Experiments Template: Comprehensive Testing

Experiments: Phase III Comprehensive Testing; Antagonist							
Experiment I.D.	Substance Code	Date	Plate Reduction	IC ₅₀ (µg/mL)	Experiment Used for Data Analysis or Repeated?	Rationale for Unacceptability	
AntCT 1-1	H0034	10-Jun-09	6.2	0.0015 ¹	Used	Acceptable	
	H0043			Positive ^{1,2}	Used	Acceptable	
AntCT 1-2	H0048		6.9	Positive ³	Used	Acceptable	
	H0056			Positive ⁴	Used	Acceptable	
AntCT 1-3	H0059		6.6	10	Used	Acceptable	
	H0066			1000	Used	Acceptable	
AntCT 1-4	H0067		8.7	370 ¹	Used	Acceptable	
	H0068			230 ¹	Used	Acceptable	
AntCT 2-1	H0069		18-Jun-09	9.9	2.6 ¹	Used	Acceptable
	H0070				0.00063	Used	Acceptable
AntCT 2-2	H0071	12		12000 ¹	Used	Acceptable	
	H0072			17 ¹	Used	Acceptable	
AntCT 2-3	H0073	8.2		3.4 ¹	Used	Acceptable	
	H0074			Negative ¹	Used	Acceptable	
AntCT 2-4	H0075	9.2		24 ¹	Used	Acceptable	
	H0076			250 ¹	Used	Acceptable	
AntCT 3-1	H0078	26-Jun-09		11	63	Used	Acceptable
	H0079				17 ¹	Used	Acceptable
AntCT 3-2	H0080		9.3	54	Used	Acceptable	
	H0081			37	Used	Acceptable	
AntCT 3-3	H0082		8.6	5.3 ¹	Used	Acceptable	
	H0084			44 ¹	Used	Acceptable	
AntCT 3-4	H0085		10	5.5 ¹	Used	Acceptable	
	H0086			3.2 ¹	Used	Acceptable	
AntCT 4-1	H0088		04-Jul-09	10	Negative	Used	Acceptable
	H0089				21 ¹	Used	Acceptable
AntCT 4-2	H0090	9.7		730	Used	Acceptable	
	H0091			3400 ¹	Used	Acceptable	
AntCT 4-3	H0092	8.1		1.5 ¹	Used	Acceptable	

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Experiments: Phase III Comprehensive Testing; Antagonist						
Experiment I.D.	Substance Code	Date	Plate Reduction	IC ₅₀ (µg/mL)	Experiment Used for Data Analysis or Repeated?	Rationale for Unacceptability
	H0093			8.5 ¹	Used	Acceptable
AntCT 4-4	H0095		10	430 ¹	Used	Acceptable
	H0096			46 ¹	Used	Acceptable
AntCT 5-1	H0097-1	11-Jul-09	9.1	-	Repeated	Fail ⁵
	H0099-1			-	Repeated	Fail ⁵
AntCT 5-2	H0100-1		11	-	Repeated	Fail ⁵
	H0102-1			-	Repeated	Fail ⁵
AntCT 5-3	H0103-1		7.9	-	Repeated	Fail ⁵
	H0104-1			-	Repeated	Fail ⁵
AntCT 5-4	H0105-1		12	-	Repeated	Fail ⁵
	H0106-1			-	Repeated	Fail ⁵
AntCT 5-5	H0097-2	22-Aug-09	14	90	Used	Acceptable
	H0099-2			150	Used	Acceptable
AntCT 5-6	H0100-2		14	Negative	Used	Acceptable
	H0102-2			Negative ¹	Used	Acceptable
AntCT 5-7	H0103-2		11	2.6 ¹	Used	Acceptable
	H0104-2			Negative ¹	Used	Acceptable
AntCT 5-8	H0105-2		12	15	Used	Acceptable
	H0106-2			Negative ¹	Used	Acceptable

¹ Deleted some points for calculating IC50. The deleted points are shown in Figure 3

² positive for antagonism at $2.00 \times 10^{+2} \sim 3.20 \times 10^{-1}$ & 1.28×10^{-2} µg/mL

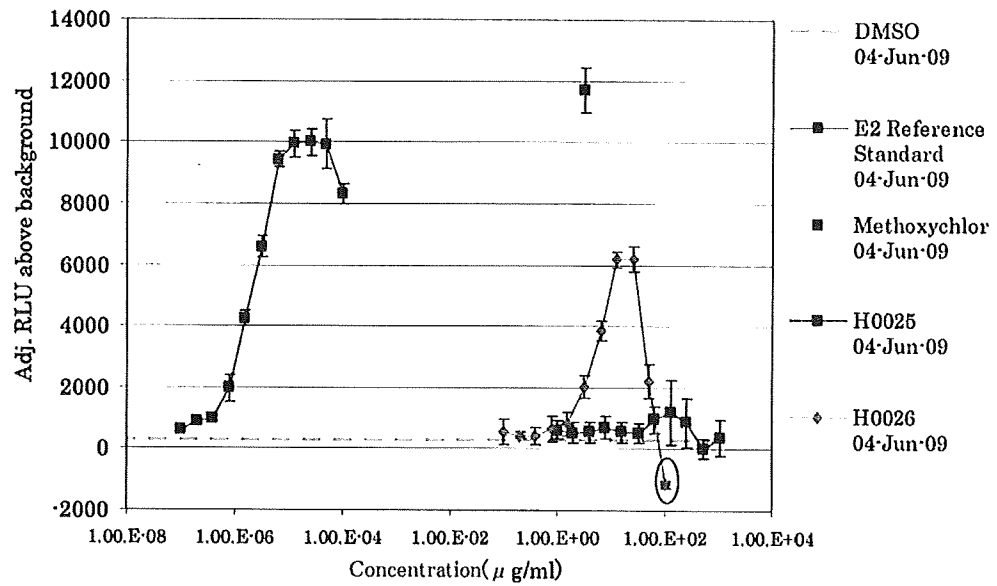
³ positive for antagonism at $1.00 \times 10^{+2} \sim 9.77 \times 10^{-2}$ µg/mL

⁴ positive for antagonism at $1.00 \times 10^{+2}$ µg/mL

⁵ The reason for the failure is because DMSO did not meet acceptance criteria

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Figure 3.1 Agonist Comprehensive Testing for AgCT 1-1[H0025-1, H0026-1]

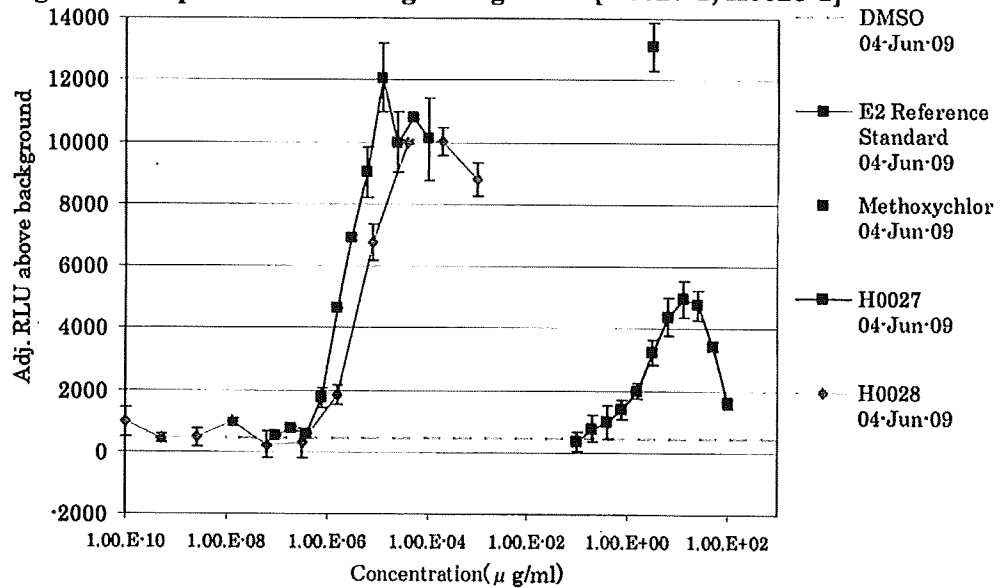


H0025-1 : Fail → p117,

H0026-1 : Fail → p117

○ : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0026-1

Figure 3.2 Agonist Comprehensive Testing for AgCT 1-2[H0027-1, H0028-1]

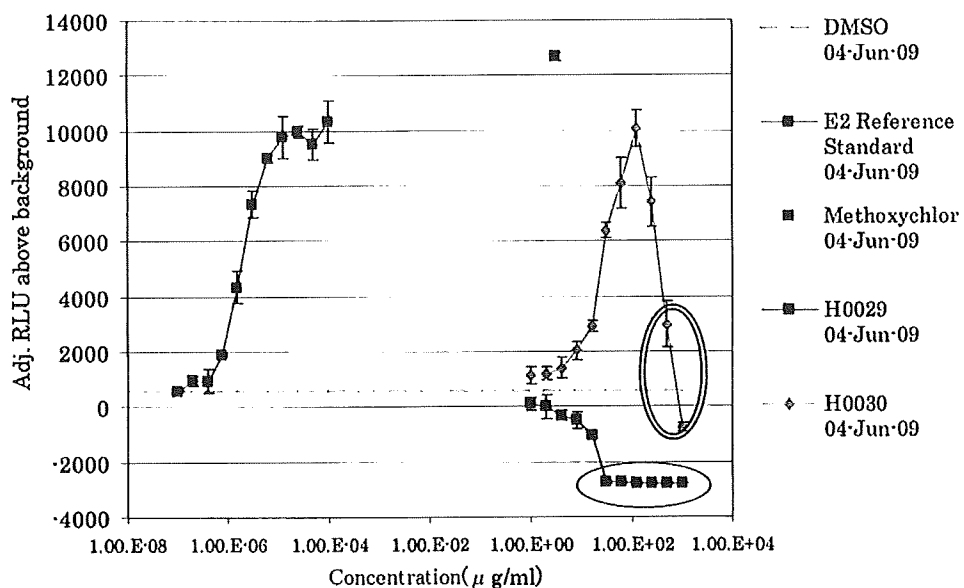


H0027-1 : Fail → p117,

H0028-1 : Fail → p117

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Figure 3.3 Agonist Comprehensive Testing for AgCT 1-3[H0029-1, H0030-1]



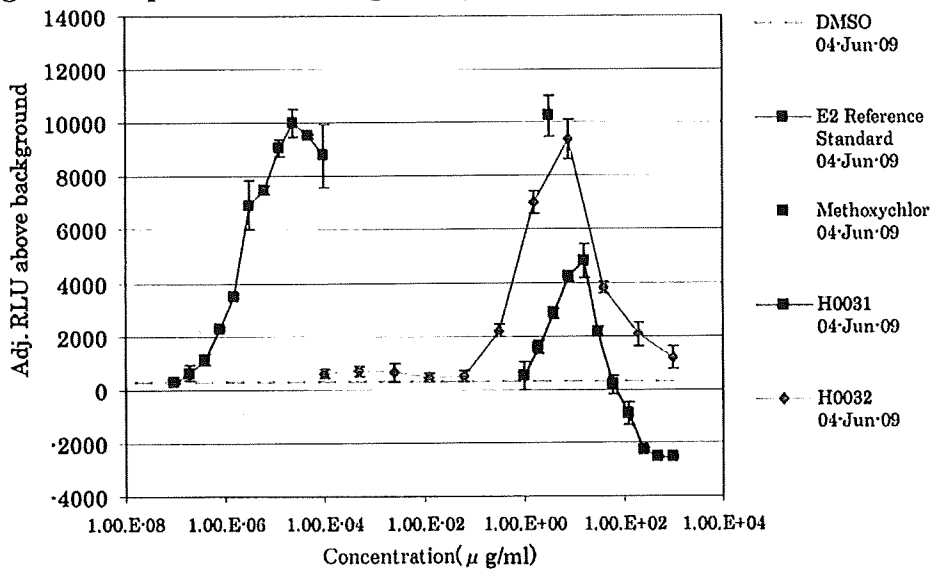
H0029-1 : Fail → p117,

H0030-1 : Fail → p117

○ : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0029-1

⊖ : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0030-1

Figure 3.4 Agonist Comprehensive Testing for AgCT 1-4[H0031-1, H0032-1]

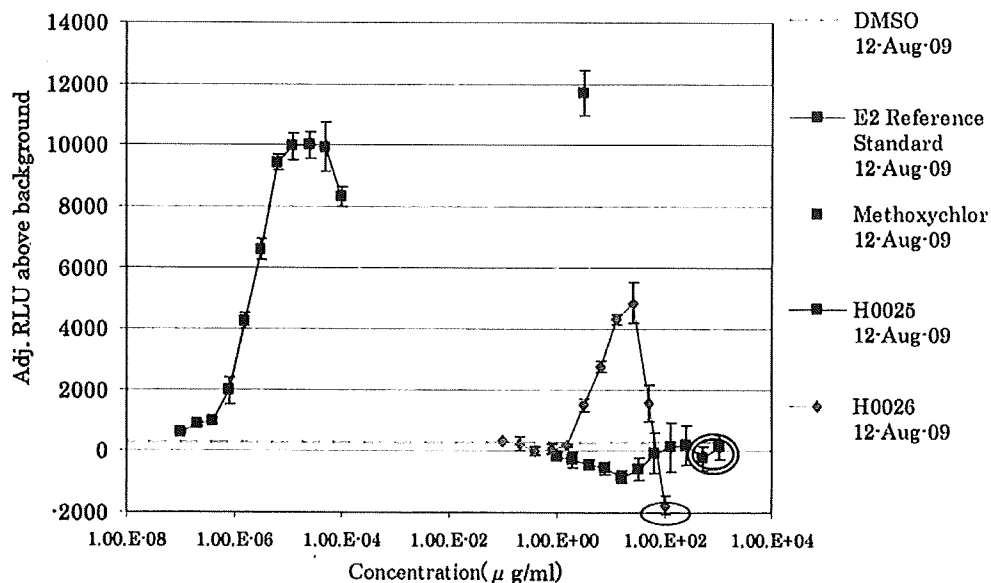


H0031-1 : Fail → p117,

H0032-1 : Fail → p117

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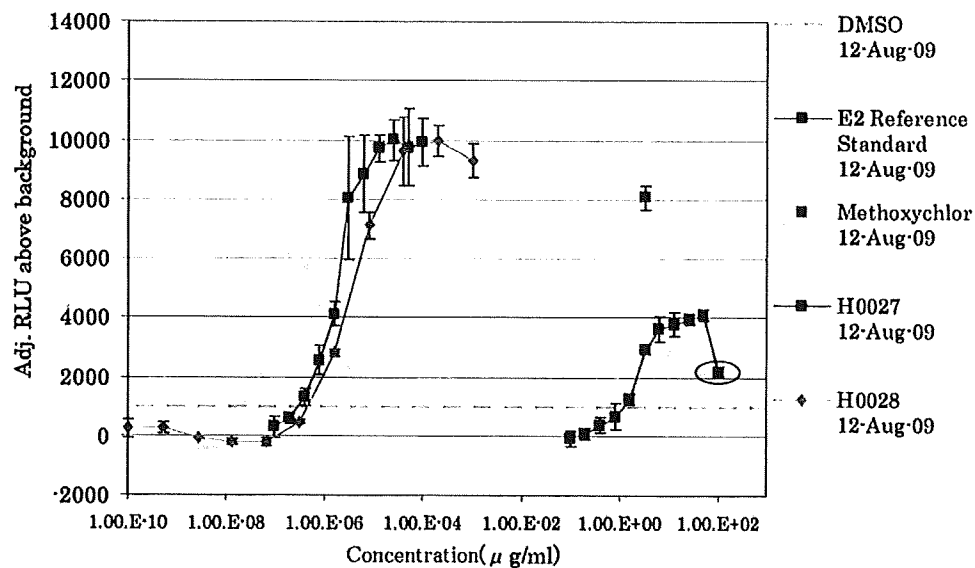
Figure 3.5 Agonist Comprehensive Testing for AgCT 1-5[H0025-2, H0026-2]



H0025-2 : Acceptable , H0026-2 : Acceptable

- : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0025-2
- ⊖ : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0026-2

Figure 3.6 Agonist Comprehensive Testing for AgCT 1-6[H0027-2, H0028-2]

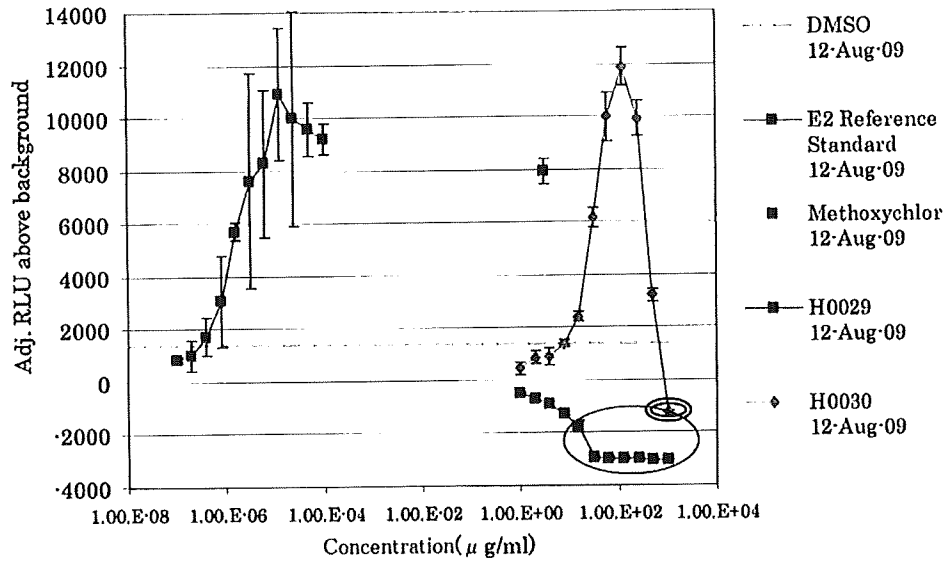


H0027-2 : Acceptable , H0028-2 : Acceptable

- : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0027-2

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Figure 3.7 Agonist Comprehensive Testing for AgCT 1-7[H0029-2, H0030-2]

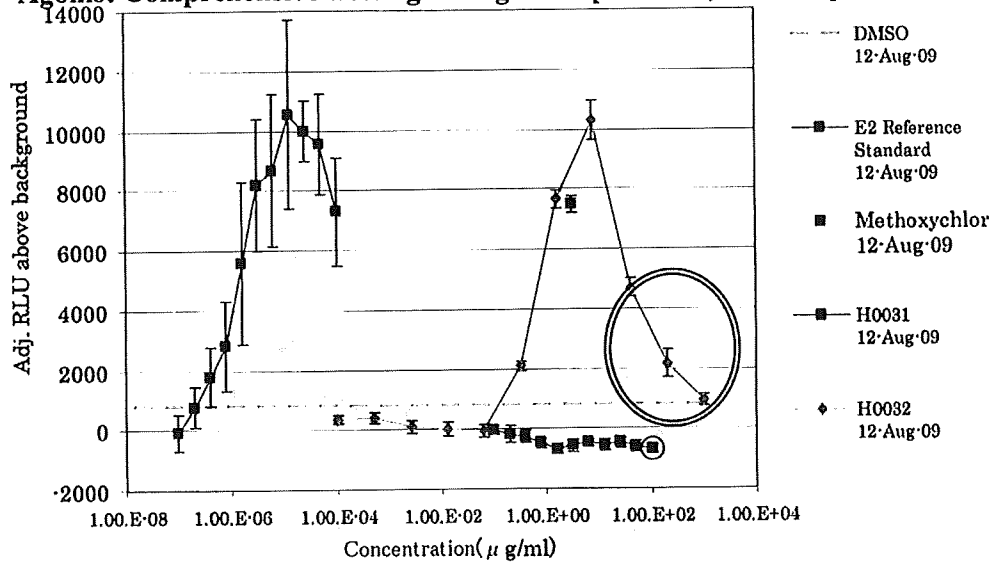


H0029-2 : Acceptable ,

H0030-2 : Acceptable

- : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0029-2
- ⊖ : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0030-2

Figure 3.8 Agonist Comprehensive Testing for AgCT1-8[H0031-2, H0032-2]



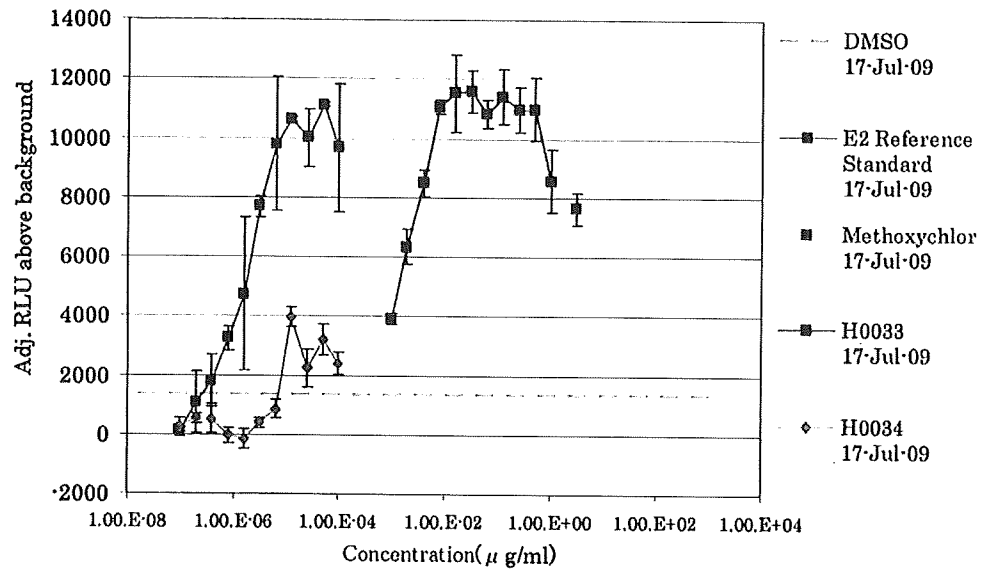
H0031-2 : Fail → p118 ,

H0032-2 : Acceptable

- : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0031-2
- ⊖ : Score2-5, Deleted 1 high concentration points to calculate EC₅₀ of H0032-2

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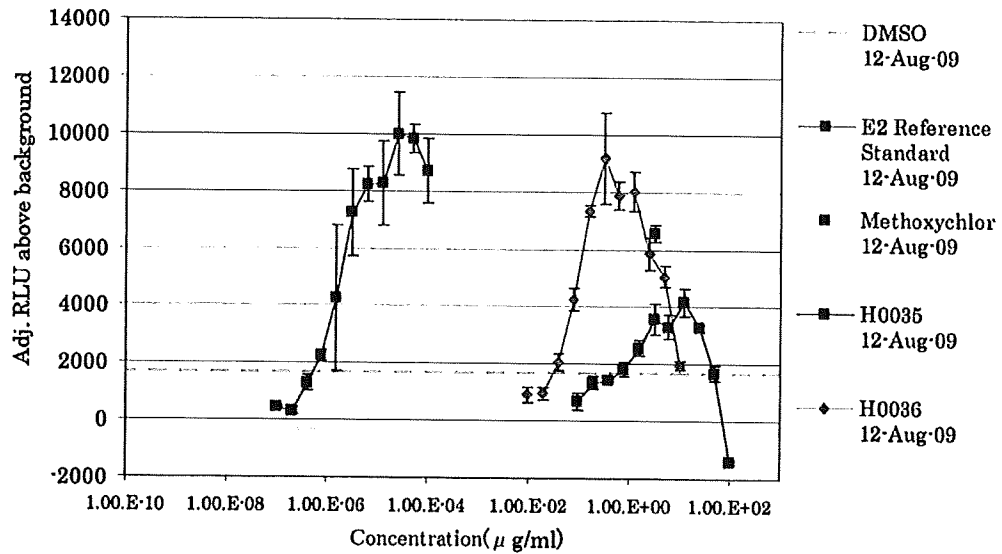
Figure 3.9 Agonist Comprehensive Testing for AgCT 2-1[H0033-1, H0034-1]



H0033-1 : Fail → p118 ,

H0034-1 : Fail → p118

Figure 3.10 Agonist Comprehensive Testing for AgCT 2-2[H0035, H0036]



H0035 : Acceptable ,

H0036 : Acceptable