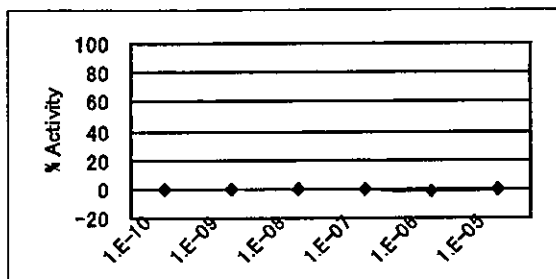


TR091

CAS No.: 017924-92-4

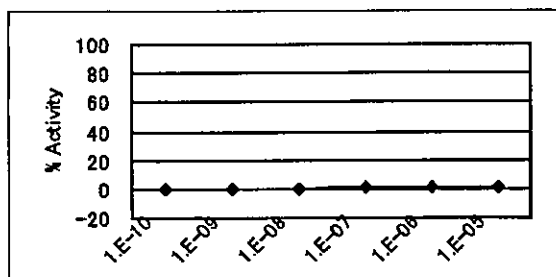
Zearalenone



TR092

CAS No.: 000057-83-0

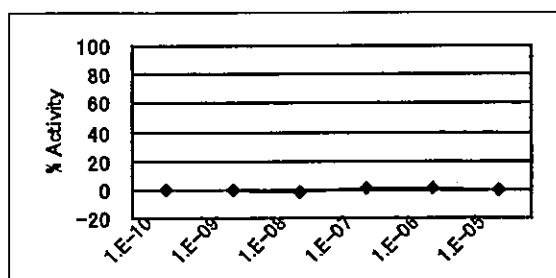
Progesterone



TR093

CAS No.: 006807-17-6

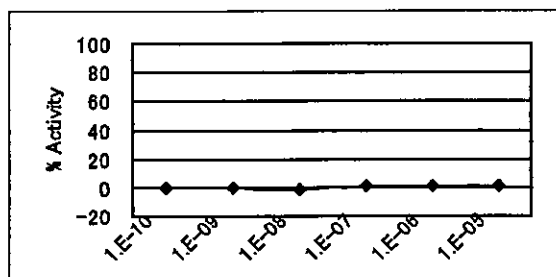
4,4'-(1,3-Dimethylbutylidene)diphenyl



TR094

CAS No.: 005466-77-3

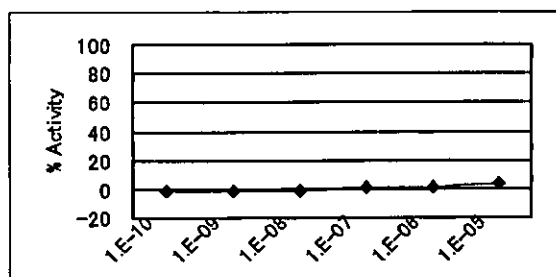
4-Methoxycinnamic Acid 2-Ethylhexyl Ester



TR095

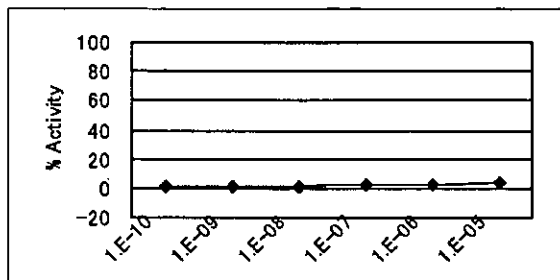
CAS No.: 005402-37-9

4-(1-Indanyl)phenol



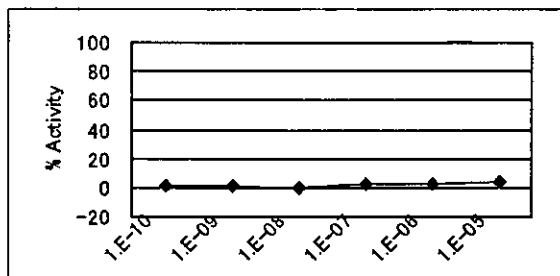
TR096

CAS No.: 000063-05-8
Androst-4-ene-3,17-dione



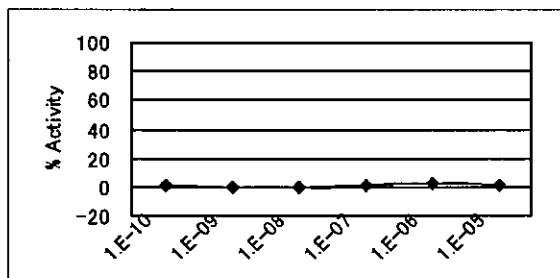
TR097

CAS No.: 001470-79-7
2,4,4'-Trihydroxybenzophenone



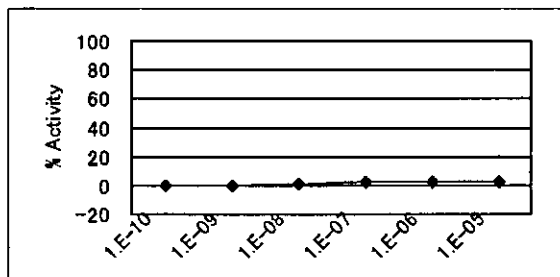
TR098

CAS No.: 000068-22-4
19-Nor-17-alpha-pregn-4-en-20-yn-3-one, 17-hydroxy-



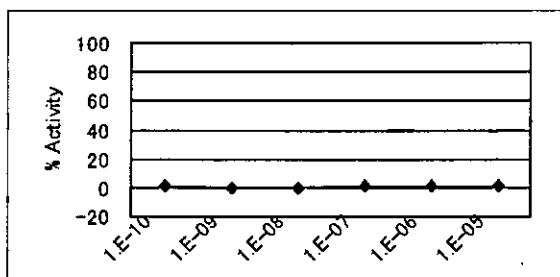
TR099

CAS No.: 000087-18-3
Salicylic Acid 4-tert-Butylphenyl Ester



TR100

CAS No.: 057486-68-7
2-Chlorophenylacetic Acid Methyl Ester

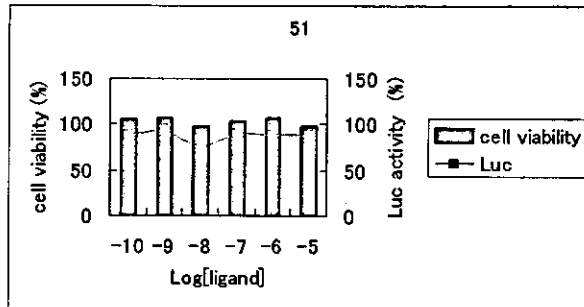


TR antagonist assay

TR051

000094-13-3

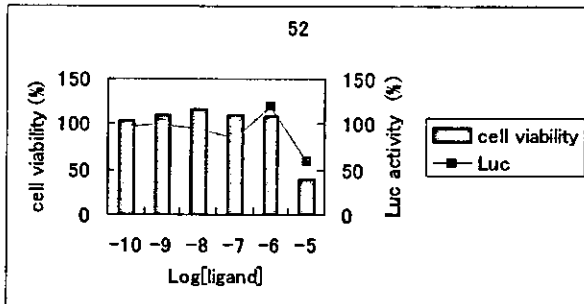
n-Propyl p-hydroxybenzoate



TR052

000500-38-9

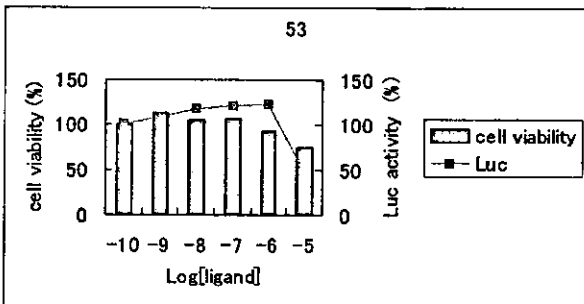
nordihydroguaiaretic acid



TR053

001478-61-1

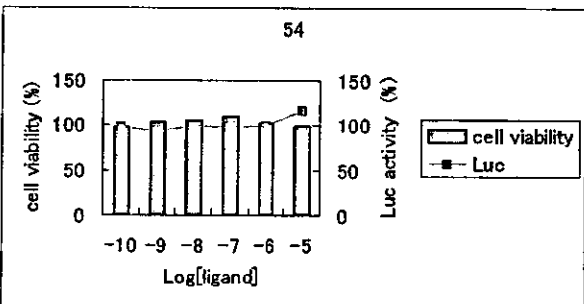
4,4'-(HEXAFLUOROISOPROPY



TR054

002491-32-9

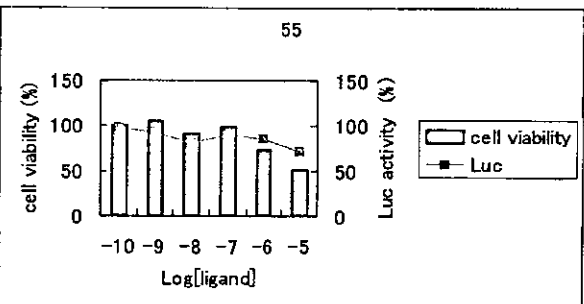
BENZYL 4-HYDROXYPHENYLK



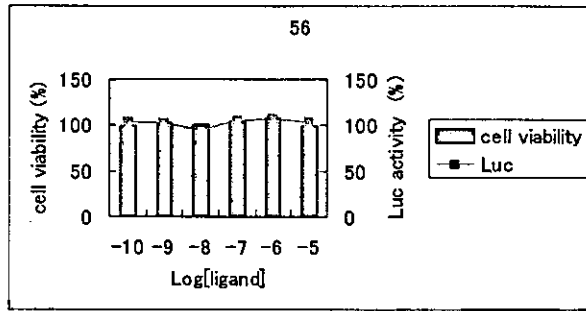
TR055

003780-50-5

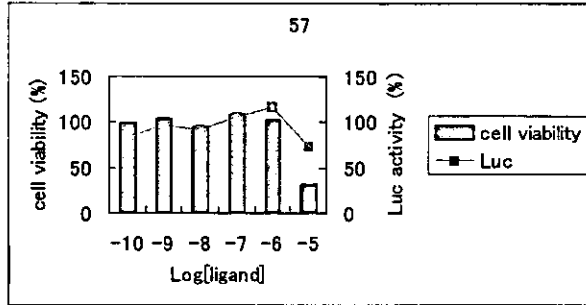
4-n-Octyloxyphenol



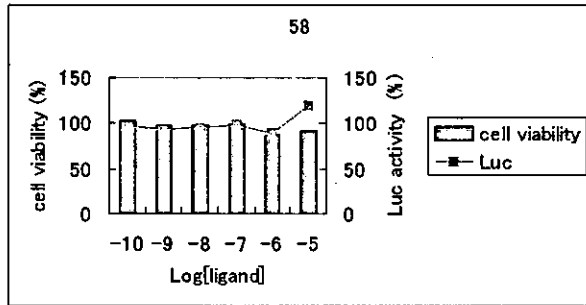
TR056
005289-74-7
Hydroxyecdysone



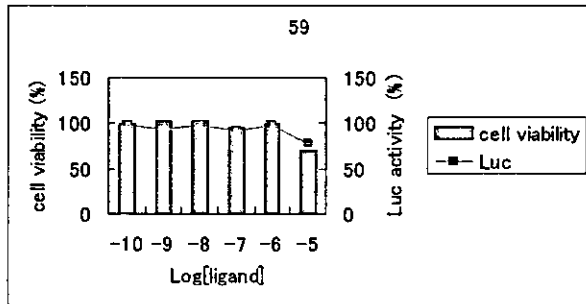
TR057
006948-88-5
alpha-Naphtholbenzein



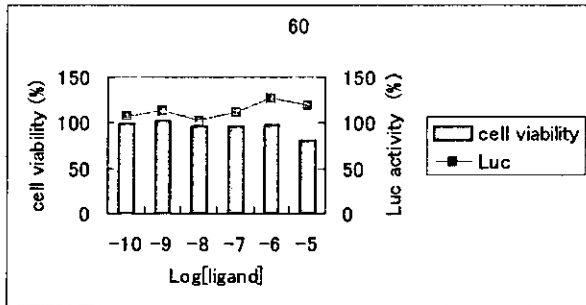
TR058
014392-69-9
4'-HYDROXYNONANOPHENON



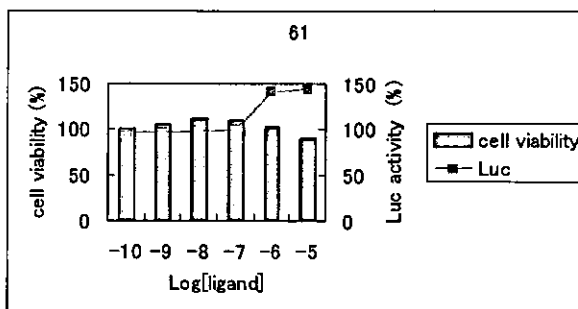
TR059
027955-94-8
1,1,1-Tris(4-hydroxyphenyl)-eth



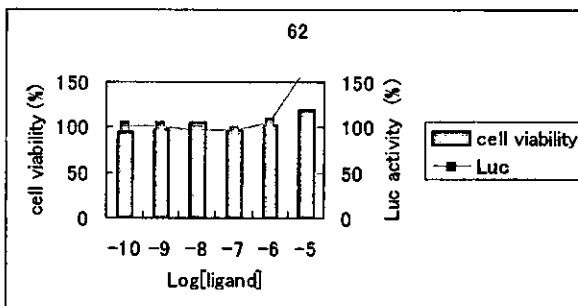
TR060
000843-55-0
4,4'-Cyclohexylidenebisphenol



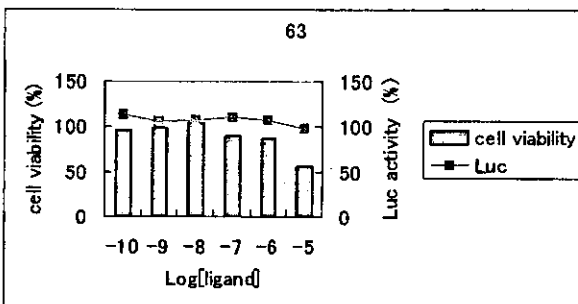
TR061
000341-58-2
2,2'-Bis(Trifluoromethyl)benzide



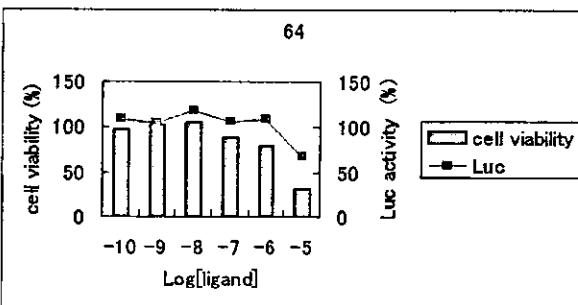
TR062
095737-68-1
pyriproxyfen



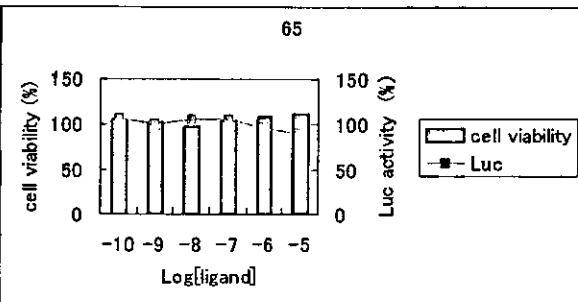
TR063
000074-31-7
p-Phenylenediamine, N,N-diphe



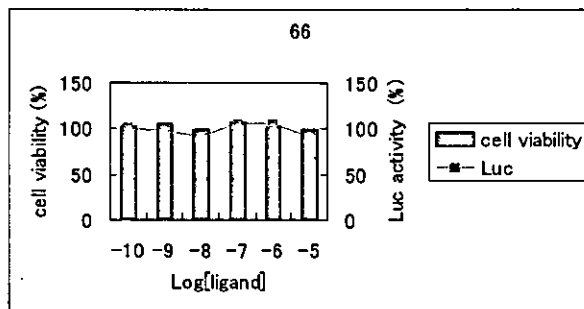
TR064
000050-41-9
Clomiphene



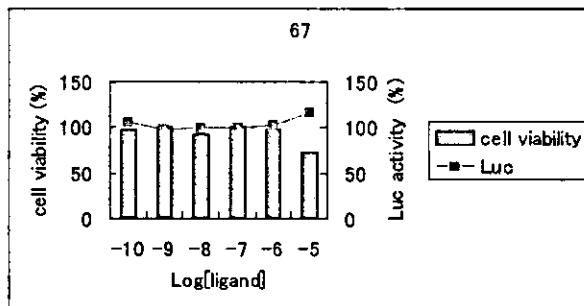
TR065
000797-63-7
D(-)-Norgestrel



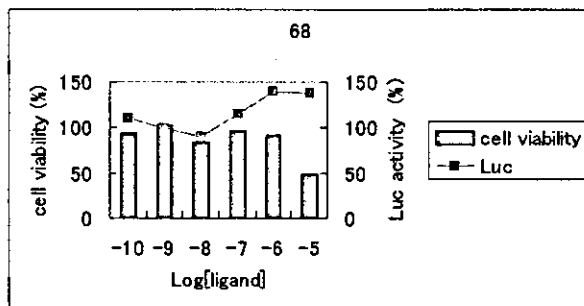
TR066
000700-06-1
Indole-3-carbinol



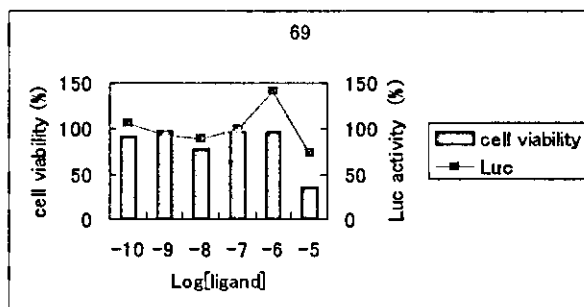
TR067
000599-64-4
4-alpha-Cumylphenol



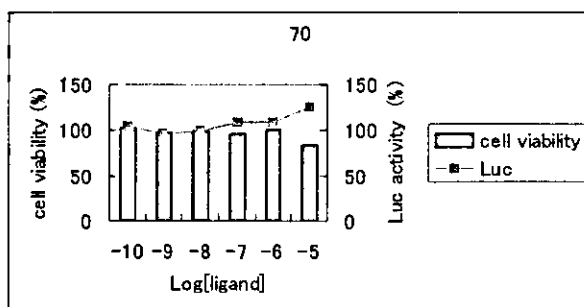
TR068
000596-01-0
alpha-Naphtholphthalein



TR069
000145-50-6
p-naphtholbenzein



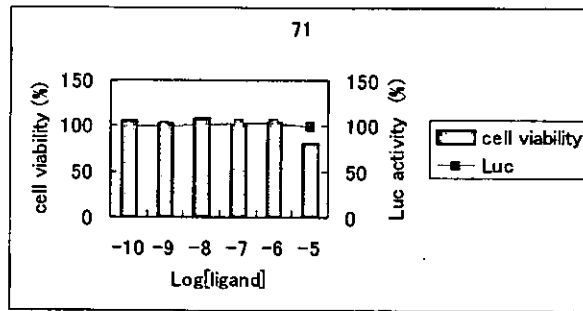
TR070
000081-92-5
Phenolphthalol



TR071

000094-26-8

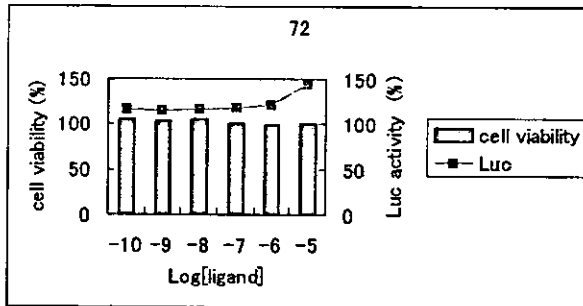
n-Butyl p-hydroxybenzoate



TR072

005153-25-3

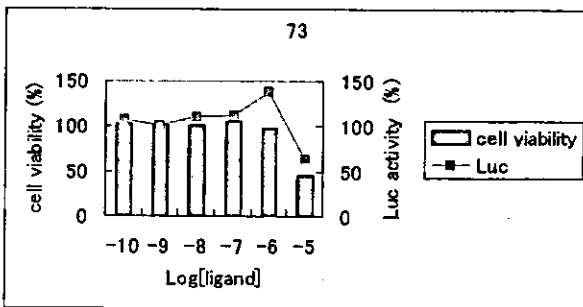
4'-Hydroxybenzoic acid 2-Ethyl



TR073

000143-50-0

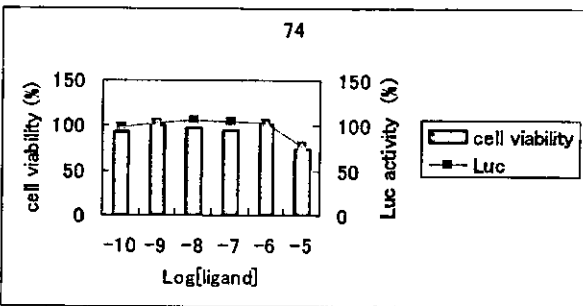
Chlordecone



TR074

000131-57-7

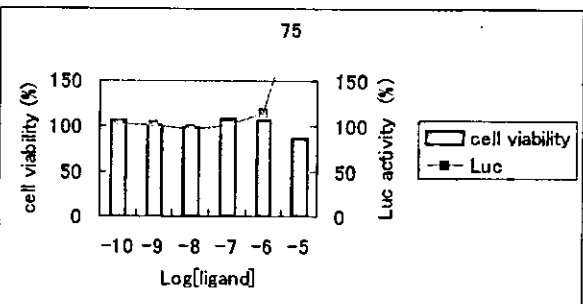
Benzophenone, 2-hydroxy-4-me



TR075

000131-55-5

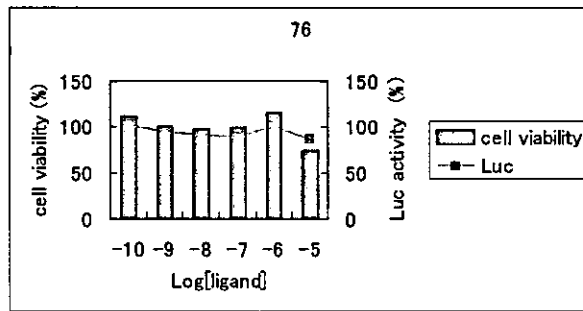
2,2',4,4'-Tetrahydroxybenzophen



TR076

000131-16-8

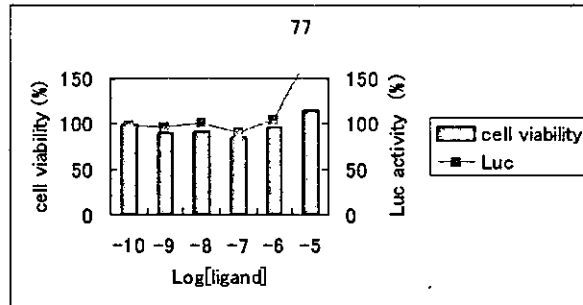
Di-n-propyl phthalate



TR077

000131-54-4

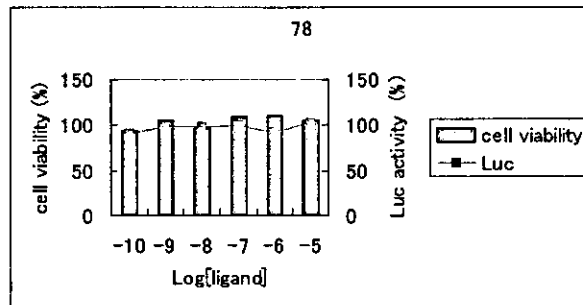
2,2'-Dihydroxy-4,4'-dimethoxyb



TR078

000501-24-6

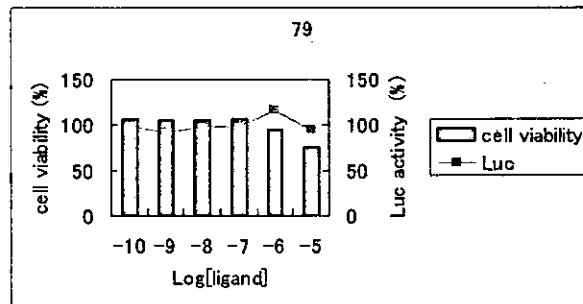
3-PENTADECYLPHENOL



TR079

023001-29-8

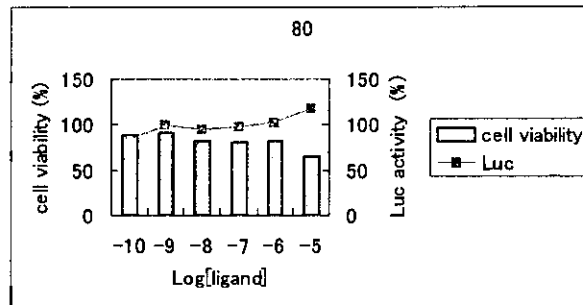
Spiro(2H-1-benzopyran-2,2'-ind



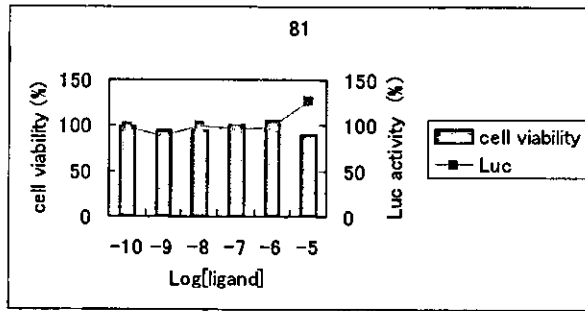
TR080

096489-71-3

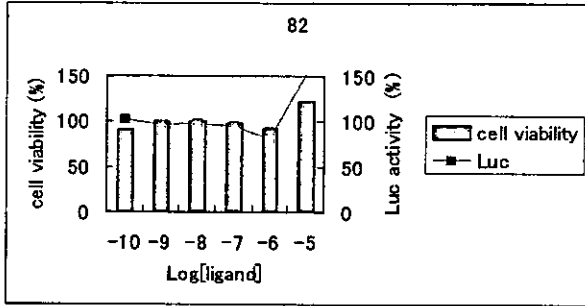
Pyridaben



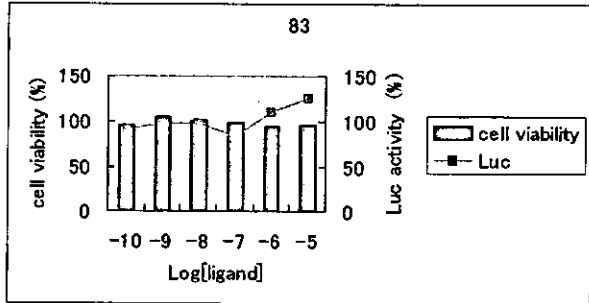
TR081
000063-25-2
Carbaryl



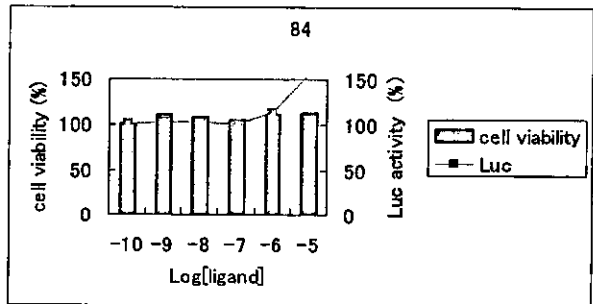
TR082
079127-80-3
Fenoxycarb



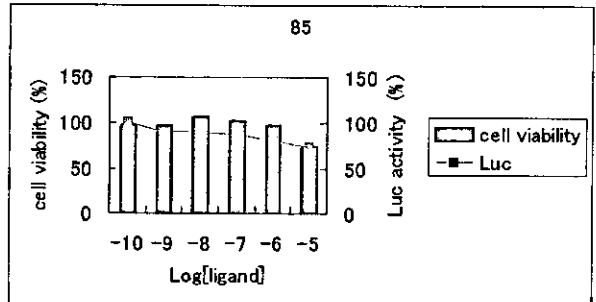
TR083
143807-66-3
chromafenozide



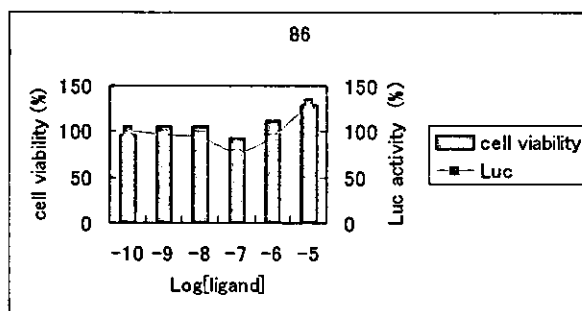
TR084
040596-69-8
Methoprene



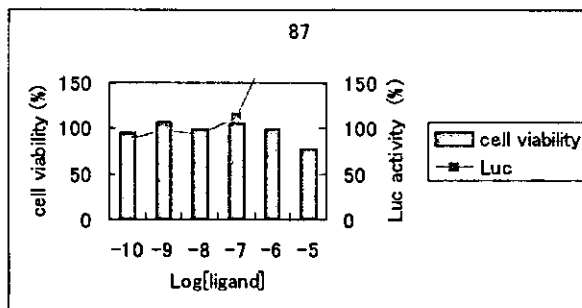
TR085
104821-25-2
Dihydroethidium



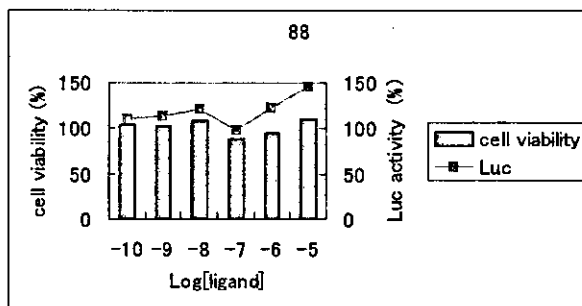
TR086
070356-09-1
Avobenzone



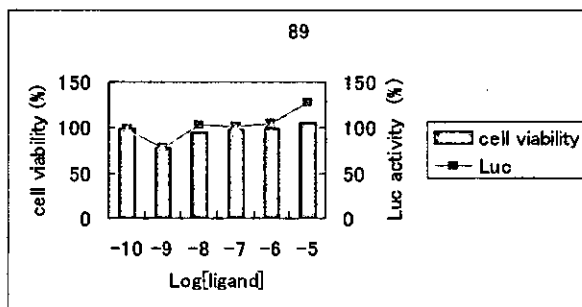
TR087
059517-19-0
3,3'-Dimethyl-4,4'-Biphenyl



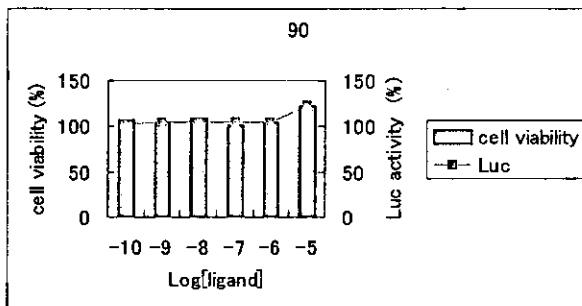
TR088
003604-87-3
Ecdysone



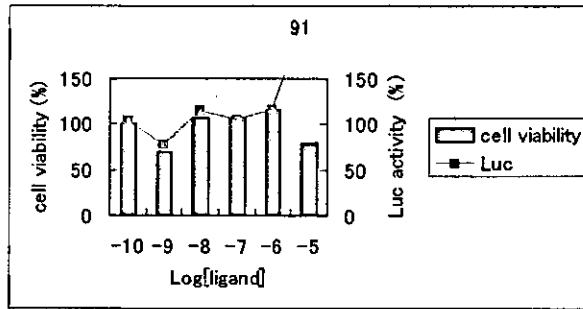
TR089
000056-49-5
3-Methylcholanthrene



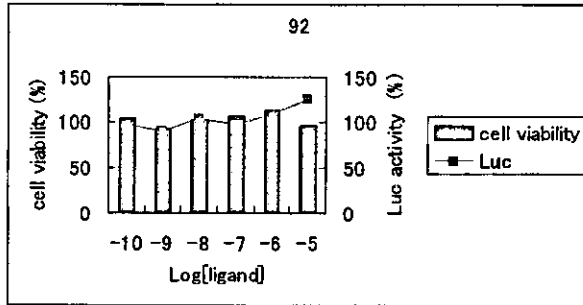
TR090
000521-18-6
Stanolone



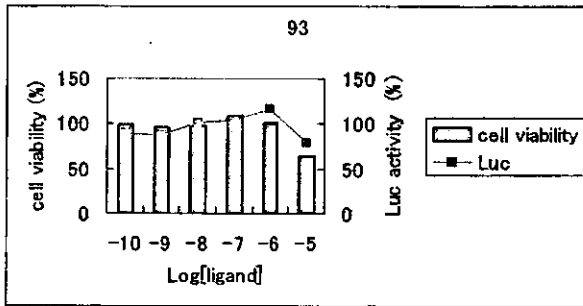
TR091
017924-92-4
Zearalenone



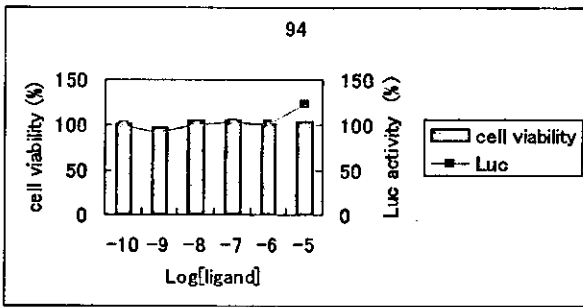
TR092
000057-83-0
Progesterone



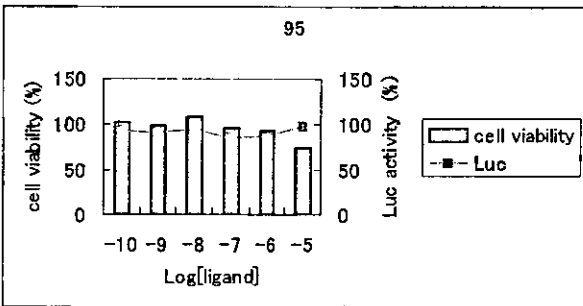
TR093
006807-17-6
4,4'-(1,3-Dimethylbutylidene)dip



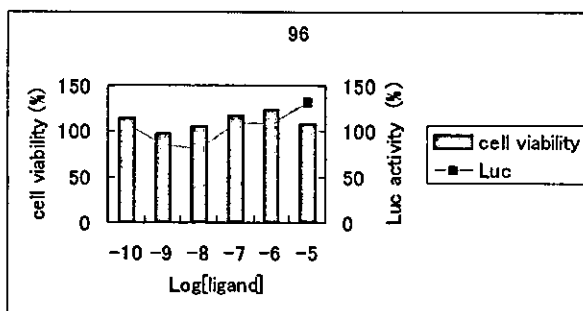
TR094
005466-77-3
4-Methoxycinnamic Acid 2-Ethy



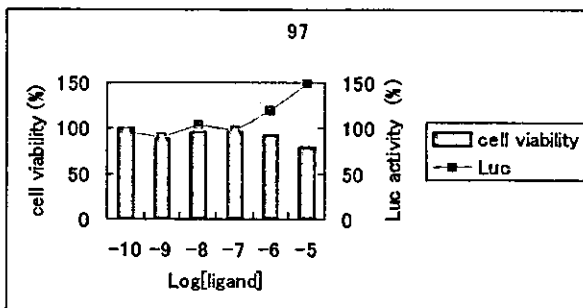
TR095
005402-37-9
4-(1-Indanyl)phenol



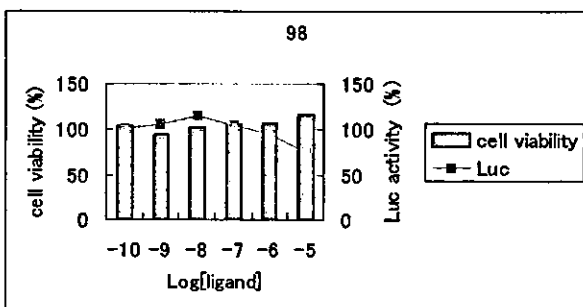
TR096
000063-05-8
Androst-4-ene-3,17-dione



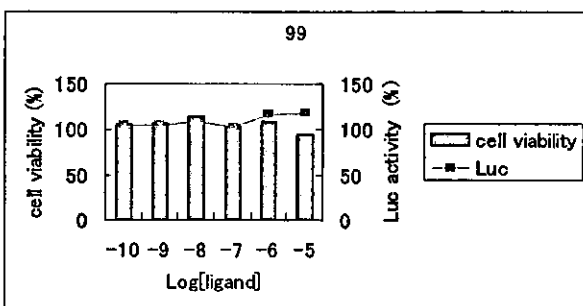
TR097
001470-79-7
2,4,4'-Trihydroxybenzophenone



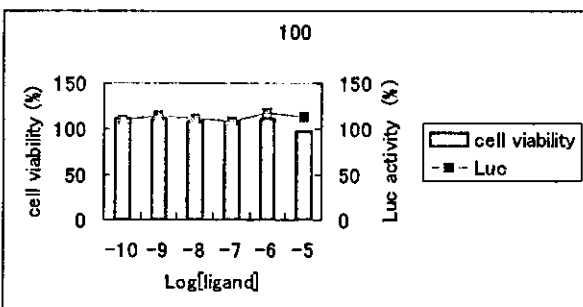
TR098
000068-22-4
Norethindrone



TR099
000087-18-3
Salicylic Acid 4-tert-Butylpheny



TR100
057486-68-7
2-Chlorophenylacetic Acid Meth



厚生労働化学研究費補助金(化学物質リスク研究事業)
総括研究報告書 図表

- (3)-1.表面プラズモン共鳴高速分析によるデータの高趣取得技術及びHTPSに特化するための試験研究
(主任研究者:ピアコア株式会社委託業務)

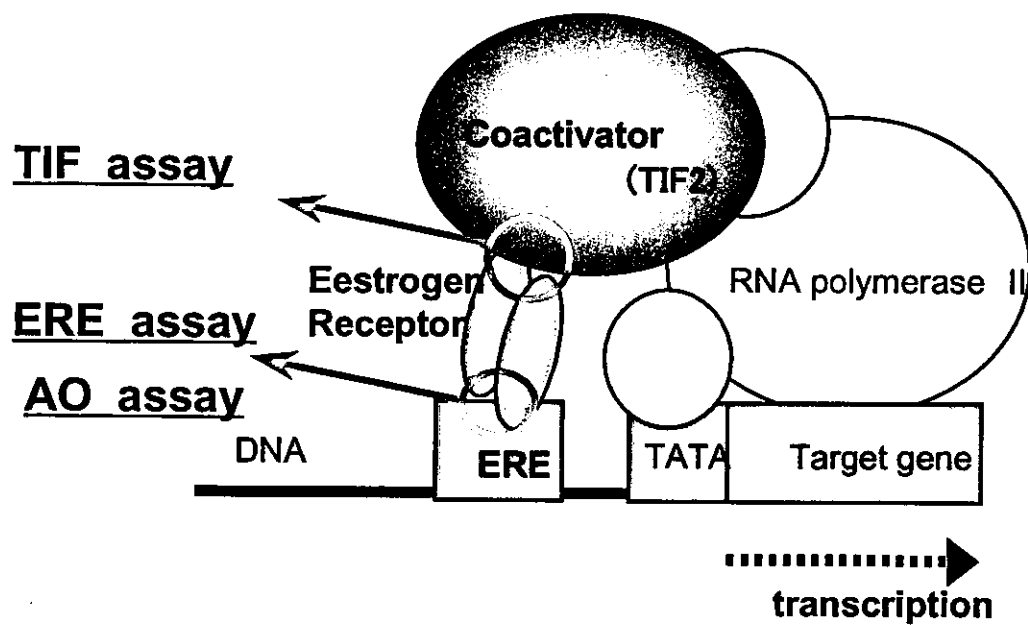


図1 表面プラズモン共鳴スクリーニング法の概要

エストロゲンレセプターの作用機構と3種類のアッセイ

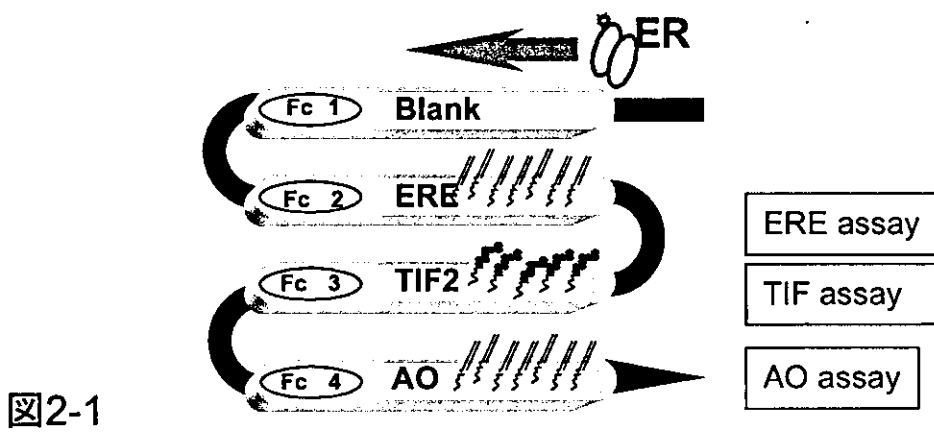


図2-1

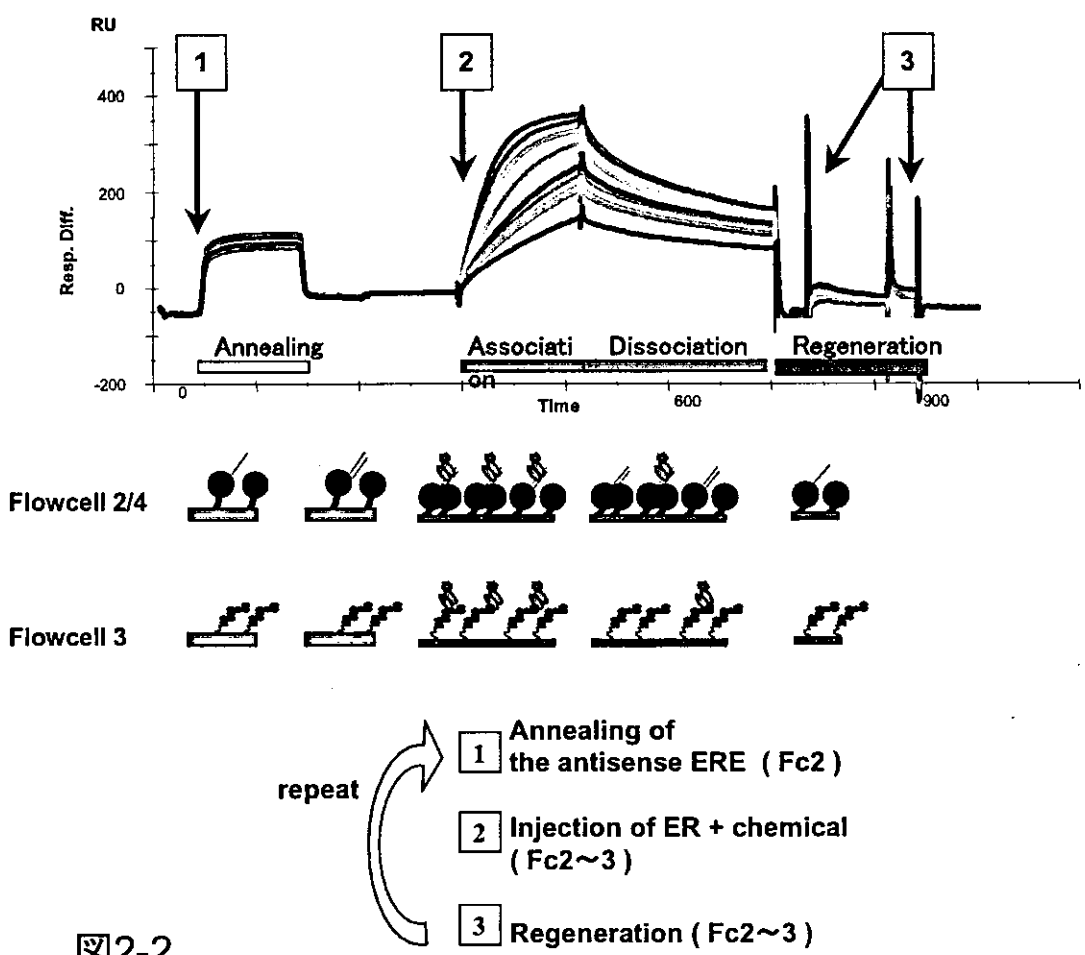
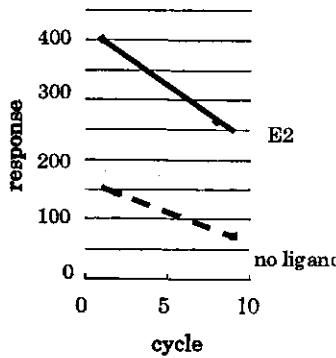
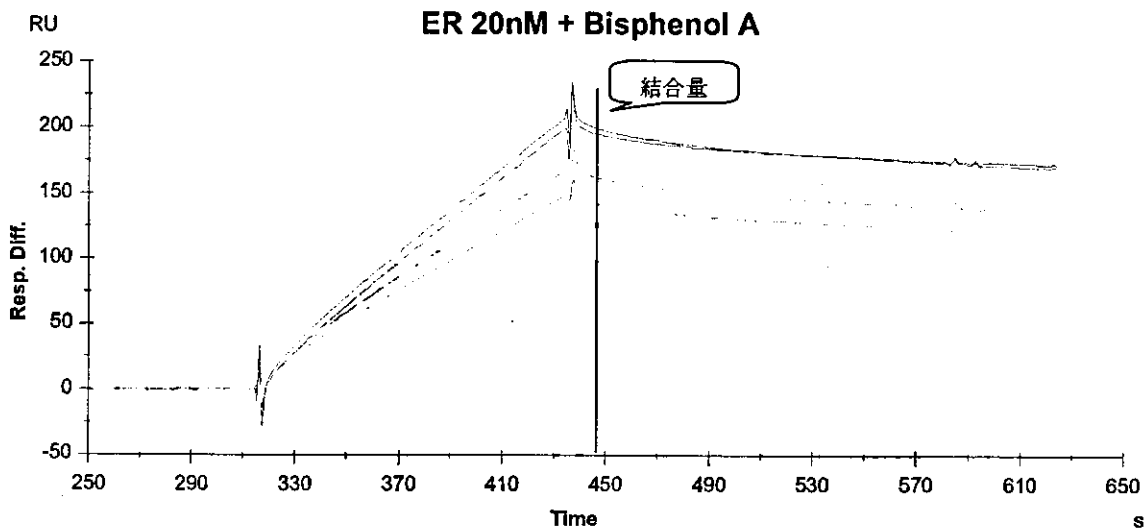
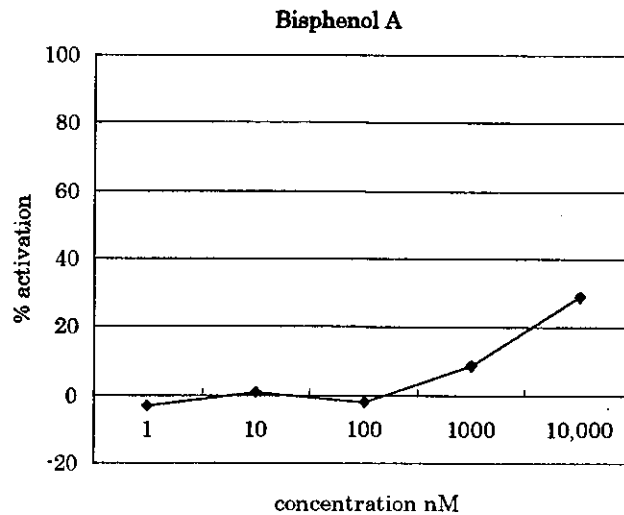


図2-2

図2 表面プラズモン共鳴センサーのアッセイ
 図2-1 センサーチップ上でのアッセイの構築
 図2-2 アッセイの流れとセンサーグラム



bisphenol A		BIA9					
cycle	conc nM	RelRes	E2cal	nolig cal	drug activation	E2 activation	%activation
2	0	141.4	380.75	141.40	0.00	239.36	0.00
9	0	70.8	246.05	70.80	0.00	175.26	0.00
7	1	84.8	284.54	90.97	-6.17	193.57	-3.19
6	10	92.1	284.54	90.97	1.13	193.57	0.58
5	100	97.2	303.78	101.05	-3.85	202.73	-1.90
4	1000	129	323.08	111.14	17.86	211.89	8.43
3	10,000	185.5	342.27	121.28	64.27	221.04	29.08
1	100	400	400.00	151.48	248.52	248.51	100.00
8	100	265.3	265.30	80.88	184.42	184.41	100.00



$$\% \text{ activation} = \frac{(\text{化学物質存在下での結合量} - \text{ネガティブコントロールでの結合量})}{(\text{100 nM E2存在下での結合量} - \text{ネガティブコントロールでの結合量})} \times 100$$

図3 ERアッセイのデータ解析法

図4 平成16年度の100化合物のスクリーニング結果

