Diethylstilbestrol

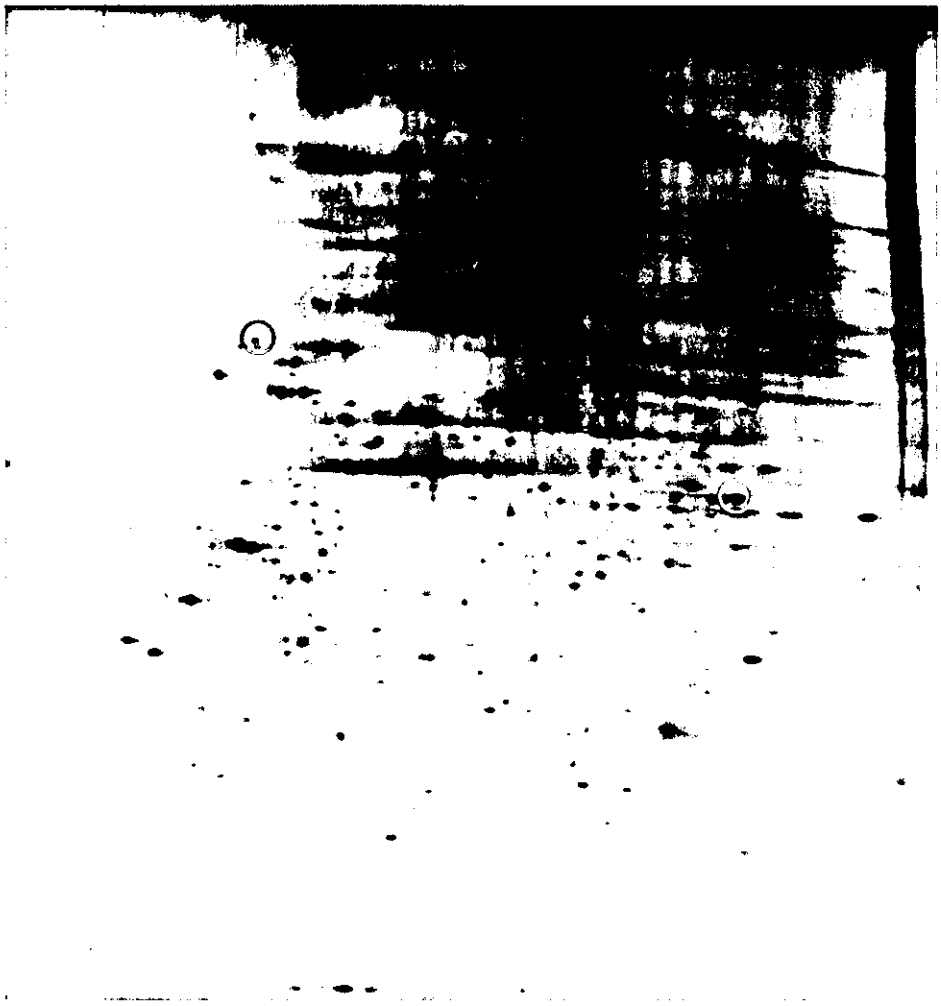


図-17
Rcho-1 細胞核抽出液の2次元電気泳動像(DES処理)。Rcho-1細胞をDESを含む培養液で培養し、その核抽出液を展開、銀染色した。赤○は対照群に比べて有意にコンテンツの上昇したスポットを示す。

ICI182780

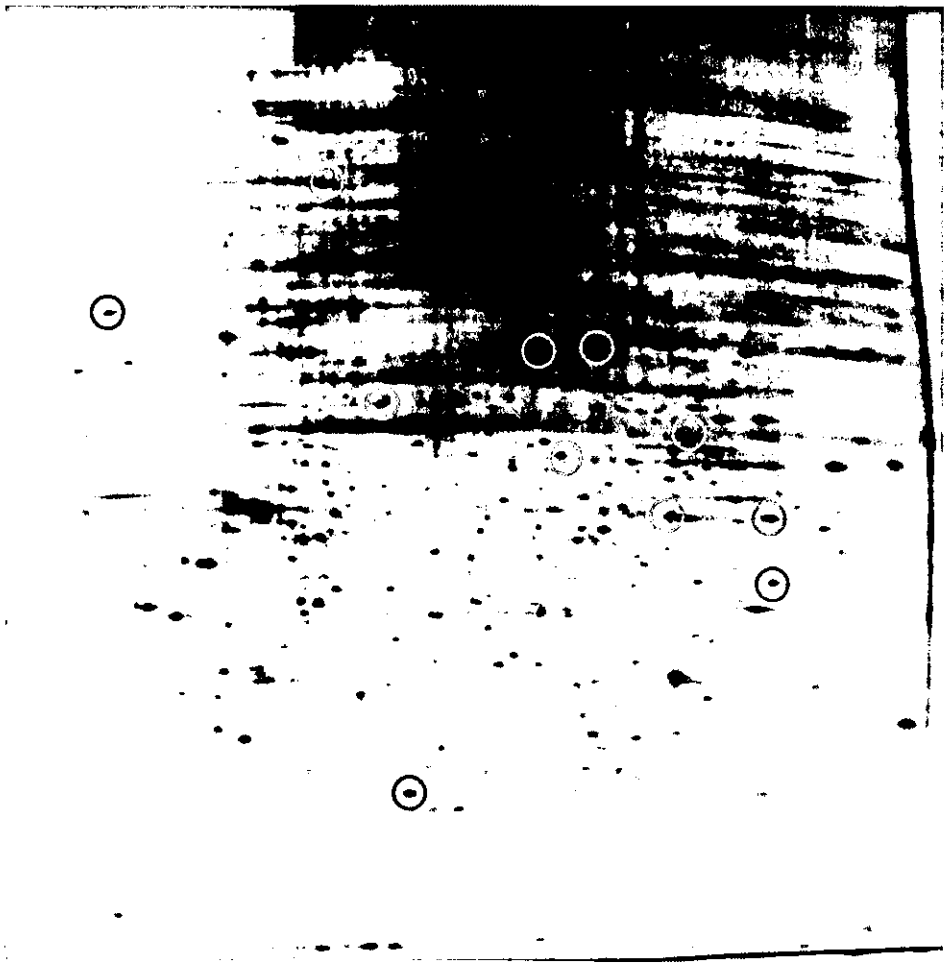


図-18
Rcho-1 細胞核抽出液の2次元電気泳動像(ICI処理)。Rcho-1細胞をICIを含む培養液で培養し、その核抽出液を展開、銀染色した。赤○は対照群に比べて有意にコンテンツの上昇したスポットを示す。

Carbaryl

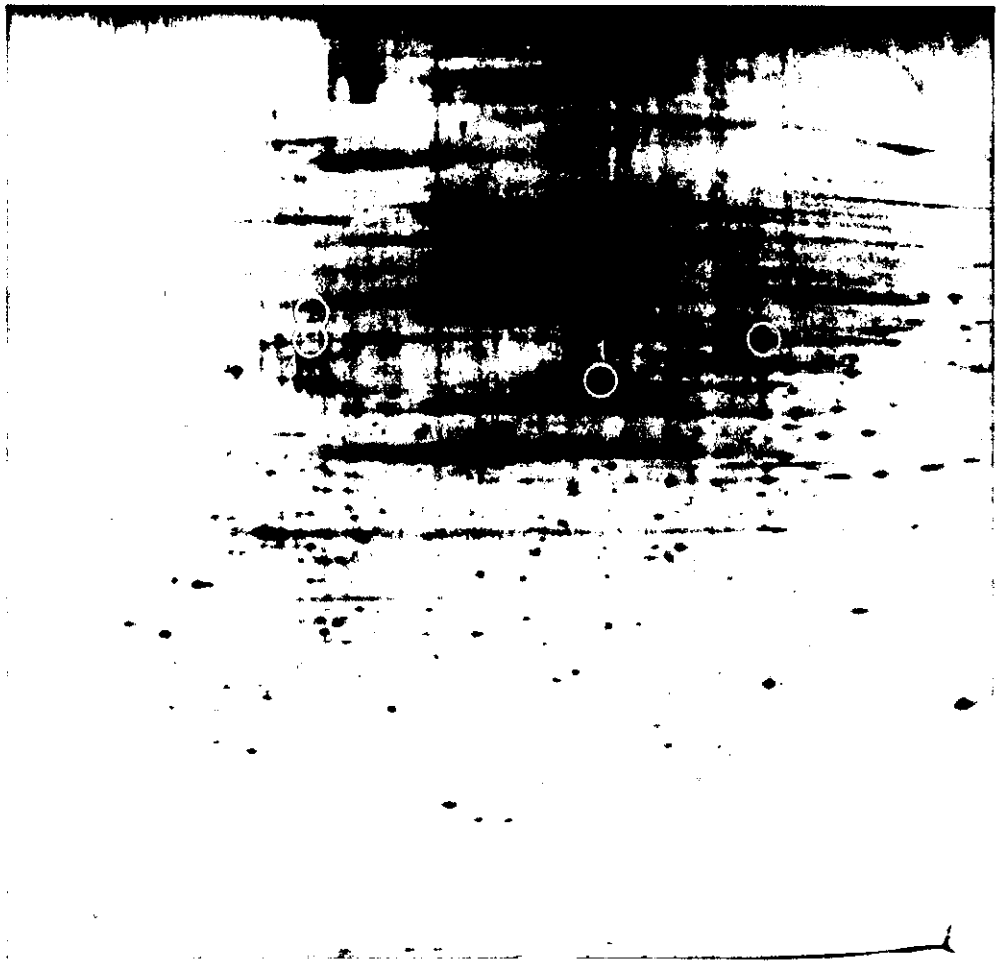
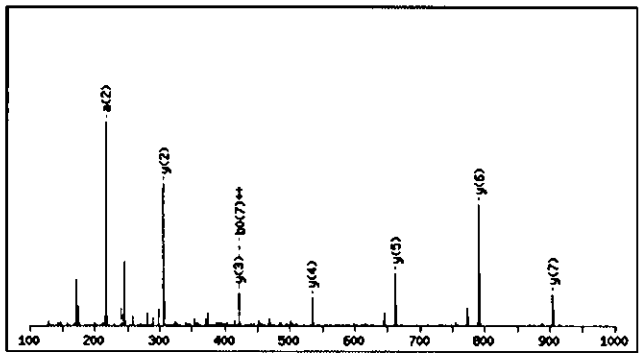


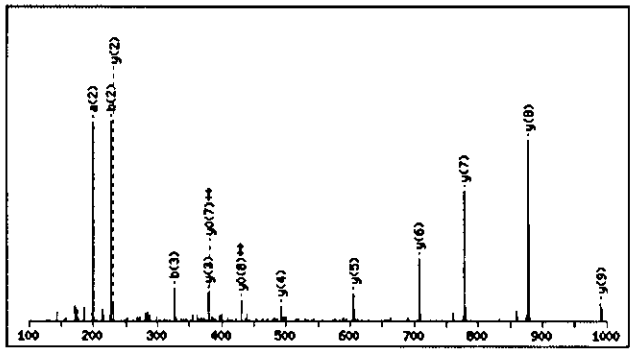
図-19
Rcho-1 細胞核抽出液の2次元電気泳動像(Carbaryl処理)。Rcho-1細胞をCarbarylを含む培養液で培養し、その核抽出液を展開、銀染色した。赤○は対照群に比べて有意にコンテンツの上昇したスポットを示す。プロテオミクス解析に供したスポットの番号を付加した。

A



#	a	a^{++}	b	b^{++}	b^*	b^{*++}	b^0	b^{0++}	Seq.	y	y^{++}	y^*	y^{*++}	y^0	y^{0++}	#
1	104.05	52.53	132.05	66.53					M							8
2	217.14	109.07	245.13	123.07					L	904.46	452.73	887.43	444.22	886.45	443.73	7
3	346.18	173.59	374.17	187.59			356.16	178.59	E	791.37	396.19	774.35	387.68	773.36	387.18	6
4	474.24	237.62	502.23	251.62	485.21	243.11	484.22	242.62	Q	662.33	331.67	645.30	323.16	644.32	322.66	5
5	587.32	294.17	615.32	308.16	598.29	299.65	597.31	299.16	L	534.27	267.64	517.24	259.13	516.26	258.63	4
6	702.35	351.68	730.34	365.68	713.32	357.16	712.33	356.67	D	421.19	211.10	404.16	202.58	403.18	202.09	3
7	833.39	417.20	861.39	431.20	844.36	422.68	843.37	422.19	M	306.16	153.58	289.13	145.07			2
8									R	175.12	88.06	158.09	79.55			1

B



#	a	a^{++}	b	b^{++}	b^*	b^{*++}	b^0	b^{0++}	Seq.	y	y^{++}	y^*	y^{*++}	y^0	y^{0++}	#
1	86.10	43.55	114.09	57.55					I							10
2	199.18	100.09	227.18	114.09					L	990.57	495.79	973.55	487.28	972.56	486.79	9
3	298.25	149.63	326.24	163.63					V	877.49	439.25	860.46	430.74	859.48	430.24	8
4	369.29	185.15	397.28	199.14					A	778.42	389.71	761.39	381.20	760.41	380.71	7
5	470.33	235.67	498.33	249.67			480.32	240.66	T	707.38	354.20	690.36	345.68	689.37	345.19	6
6	584.38	292.69	612.37	306.69	595.35	298.18	594.36	297.68	N	606.34	303.67	589.31	295.16			5
7	697.46	349.23	725.46	363.23	708.43	354.72	707.45	354.23	L	492.29	246.65	475.27	238.14			4
8	844.53	422.77	872.52	436.77	855.50	428.25	854.51	427.76	F	379.21	190.11	362.18	181.60			3
9	901.55	451.28	929.55	465.28	912.52	456.76	911.54	456.27	G	232.14	116.57	215.11	108.06			2
10									R	175.12	88.06	158.09	79.55			1

図-20
Rcho-1 細胞核抽出液(Carbaryl処理)に見られたスポット1のLC-MS/MS解析結果(ペプチドビュー)。Q-TOF解析によるペプチド断片2種のMS/MSスペクトルとイオンスコア(a, b, yシリーズ)、ならびに決定されたアミノ酸配列を示した。

Protein View

Match to: **gi|55562871**; Score: **307**
Nuclear RNA helicase, DECD variant of DEAD box family [Rattus norvegicus]
Found in search of \\Qug\spro2.PRO\OutputESI\p105030902.pkl

Nominal mass (M_r): **49078**; Calculated pI value: **5.46**
NCBI BLAST search of gi|55562871 against nr
Unformatted sequence string for pasting into other applications
Links to retrieve other entries containing this sequence from NCBI Entrez:
gi|55926219 (no taxonomy information for this entry)

Variable modifications: Acetyl (N-term),Oxidation (M)
Cleavage by Trypsin: cuts C-term side of KR unless next residue is P
Sequence Coverage: **16%**

Matched peptides shown in Bold Red

```
   1 MAEQDVENEL LDYDEDEEPQ VPQESTPAPP KKDVKGSYVS IHSSGFRDFL
  51 LKPELLRAIV DCGFEHPSEV QHECIPQAIL GMDVLCQAKS GMGKTAVFVL
 101 AILQQIEPIN GQVSVLVMCH TRELAFQISK EYERFSKYMP SVKVSVFFGG
 151 LSIKKDEDVL KKNCPHVVVG TPGRILALVR SRSLNLRNVK HFVLDECDKM
 201 LEQLDMRRDV QEIFRLTPHE KQCMMFSATL SKEIRPVCRK FMQDPMEVFV
 251 DDETKLTLHG LCQYYVKLKD SEKNRKLFDL LDVLEFNQVV IFVKSVQRCM
 301 ALAQLLVEQN FPAIAIHRGM AQEERLSRYQ QFKDFQRRIL VATNLFGRGM
 351 DIERVNIVFN YDMPEDSDTY LHRVARAGRF GTKGLAVTFV SDENDAKILN
 401 DVQDRFEVNV AELPEEIDIS TYIEQSR
```

Start - End	Observed	Mr(expt)	Mr(calc)	Delta	Miss	Sequence
48 - 57	622.35	1242.69	1242.73	-0.05	0	DFLLKPELLR (Ions score 30)
123 - 130	468.25	934.48	934.51	-0.03	0	ELAFQISK (Ions score 34)
200 - 207	518.23	1034.45	1034.49	-0.04	0	MLEQLDMR (Ions score 54)
209 - 215	453.72	905.42	905.46	-0.04	0	DVQEIFR (Ions score 32)
256 - 267	488.25	1461.73	1461.80	-0.07	0	LTLHGLCQYYVK (Ions score 46)
339 - 348	552.31	1102.60	1102.65	-0.05	0	ILVATNLFGR (Ions score 67)
384 - 397	733.34	1464.67	1464.71	-0.04	0	GLAVTFVSDENDAK (Ions score 43)

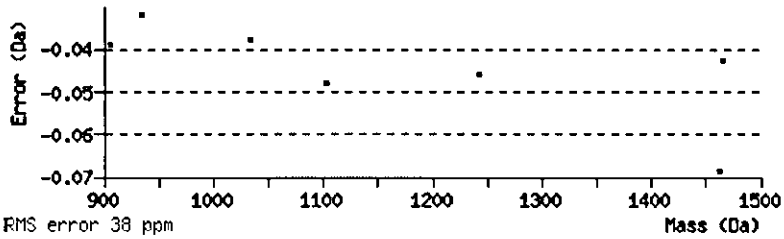


図-21
Rcho-1 細胞核抽出液(Carbaryl処理)に見られた誘導性スポット1のnanoLC-MS/MS解析のMascot検索結果(プロテインビュー)。最大スコアを示したタンパクとしてNuclear RNA helicaseファミリーがラットデータベースにより検索された。分子量、等電点ともに2次元電気泳動スポット情報と一致していた。得られたペプチド断片シークエンスが赤で示されている。

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F．健康危機情報

なし

G．研究発表

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H. 知的所有権の取得状況

なし