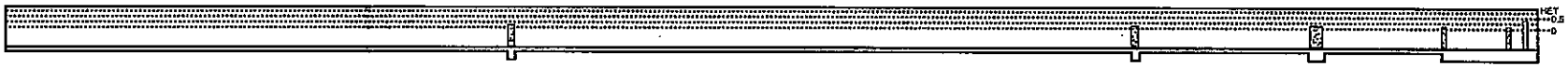
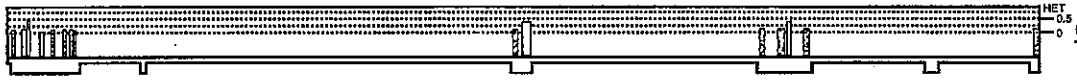
gene model (contig mRNA transcript):	Contig Label	Contig	mrna	protein	mrna orientation	transcript	snp count
	reference	NT 021937	NM_138697	NP 619642	forward	plus strand 8, coding	



Region	Contig position	mRNA pos	dbSNP rs# cluster id	Hetero-zygosity	Validation	3D	OMIM	Function	dbSNP allele	Protein residue	Codon pos	Amino acid pos
exon_1	1152801	1						start codon				1
exon_1	1152811	11	rs35375392	0.034				nonsynonymous	A	Tyr [Y]	2	4
				0.034				contig reference	G	Cys [C]	2	4
exon_2	1168473	329	rs41278020	N.D.				nonsynonymous	T	Val [V]	2	110
				N.D.				contig reference	C	Ala [A]	2	110
exon_3	1172598	1039	rs10864628	0.128	2 HT	Yes		nonsynonymous	G	Glu [E]	1	347
				0.128	2 HT	Yes		contig reference	A	Lys [K]	1	347
	1172626	1067	rs41307749	N.D.				nonsynonymous	G	Cys [C]	2	356
				N.D.				contig reference	C	Ser [S]	2	356
	1172673	1114	rs34160967	0.137	2			nonsynonymous	A	Thr [T]	1	372
				0.137	2			contig reference	G	Ala [A]	1	372
exon_5	1174423	1520	rs35118458	0.059	2			nonsynonymous	A	Gln [Q]	2	507
				0.059	2			contig reference	G	Arg [R]	2	507
exon_6	1176292	1807	rs41278022	N.D.				nonsynonymous	T	Cys [C]	1	603
				N.D.				contig reference	C	Arg [R]	1	603
	1176759	2274	rs34857011	0.126	2			synonymous	A	Glu [E]	3	758
				0.126	2			contig reference	G	Glu [E]	3	758

FIG. 1

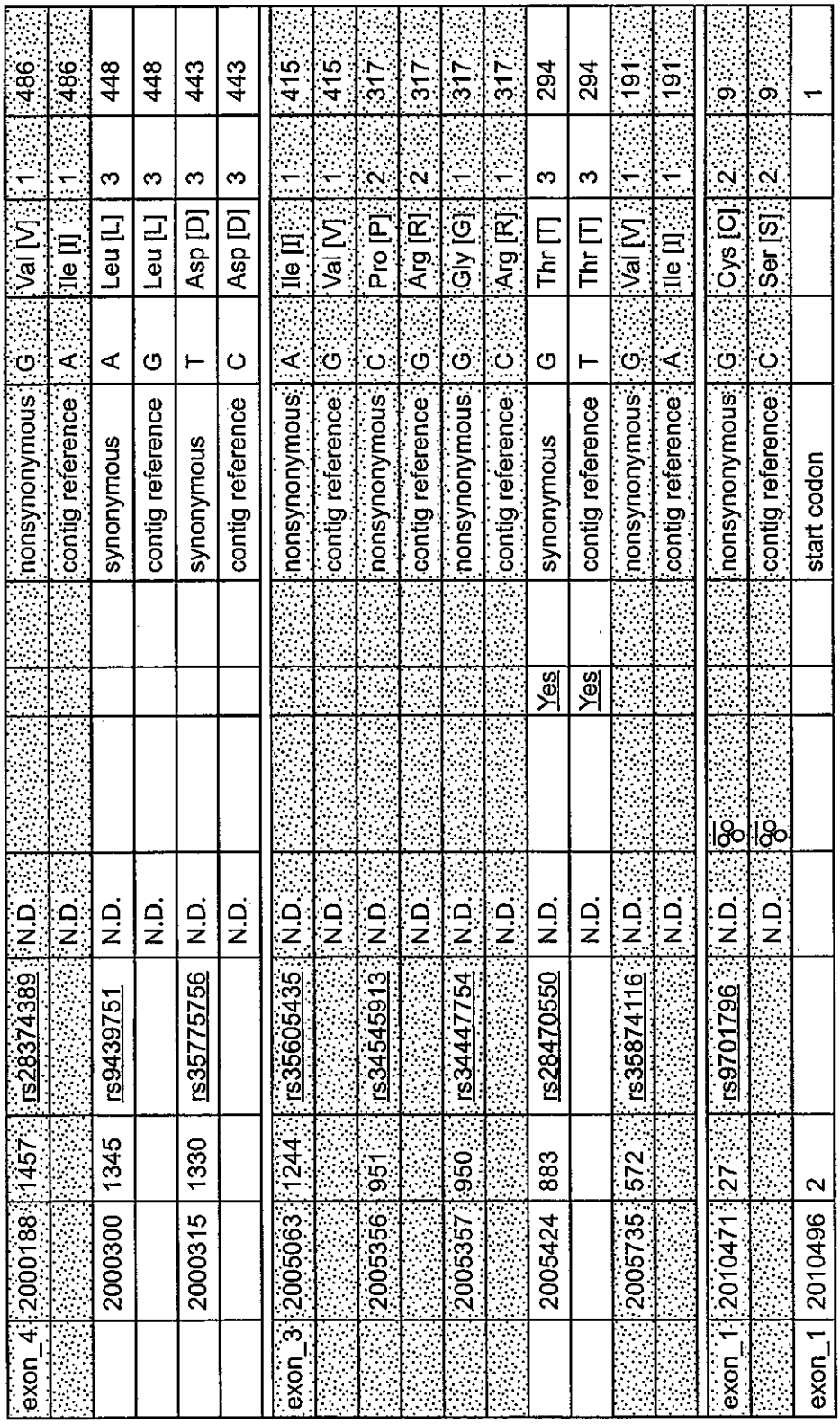
gene model (contig mRNA transcript):	Contig Label	Contig	mrna	protein	mrna orientation	transcript	snp count
	reference	NT_004610	NM_152232	NP_689418	reverse	minus strand 17, coding	



Color Legend

Region	Contig position	mRNA pos	dbSNP rs# cluster id	Hetero-zygosity	Validation	3D	OMIM	Function	dbSNP allele	Protein residue	Codon pos	Amino acid pos
exon_6	1990442	2514	rs9988418	0.074				nonsynonymous	A	Lys [K]	2	838
				0.074				contig reference	G	Arg [R]	2	838
	1990585	2731	rs12075191	0.104				synonymous	T	Ile [I]	3	790
				0.104				contig reference	C	Ile [I]	3	790
	1990636	2320	rs12033832	0.457				synonymous	T	Ser [S]	3	773
				0.457				contig reference	C	Ser [S]	3	773
	1990843	2113	rs34542537	0.030				synonymous	T	Pro [P]	3	704
				0.030				contig reference	C	Pro [P]	3	704
	1991007	1949	rs41273165	N.D.				nonsynonymous	A	Met [M]	1	650
				N.D.				contig reference	G	Val [V]	1	650
	1991171	1785	rs41273167	N.D.				nonsynonymous	C	Thr [T]	2	595
				N.D.				contig reference	T	Ile [I]	2	595
	1991235	1721	rs6662276	0.122				nonsynonymous	A	Thr [T]	1	574
				0.122				contig reference	G	Ala [A]	1	574
	1991236	1720	rs11805253	N.D.				synonymous	T	Ala [A]	3	573
				N.D.				contig reference	C	Ala [A]	3	573

FIG. 2A



exon_4	2000188	1457	rs28374389	N.D.				nonsynonymous	G	Val [V]	1	486	
				N.D.				contig reference	A	Ile [I]	1	486	
	2000300	1345	rs9439751	N.D.				synonymous	A	Leu [L]	3	448	
				N.D.				contig reference	G	Leu [L]	3	448	
	2000315	1330	rs35775756	N.D.				synonymous	T	Asp [D]	3	443	
				N.D.				contig reference	C	Asp [D]	3	443	
exon_3	2005063	1244	rs35605435	N.D.				nonsynonymous	A	Ile [I]	1	415	
				N.D.				contig reference	G	Val [V]	1	415	
	2005356	951	rs34545913	N.D.				nonsynonymous	C	Pro [P]	2	317	
				N.D.				contig reference	G	Arg [R]	2	317	
	2005357	950	rs34447754	N.D.				nonsynonymous	G	Gly [G]	1	317	
				N.D.				contig reference	C	Arg [R]	1	317	
	2005424	883	rs28470550	N.D.		Yes		synonymous	G	Thr [T]	3	294	
				N.D.		Yes		contig reference	T	Thr [T]	3	294	
	2005735	572	rs35874116	N.D.				nonsynonymous	G	Val [V]	1	191	
				N.D.				contig reference	A	Ile [I]	1	191	
exon_1	2010471	27	rs9701796	N.D.	∞			nonsynonymous	G	Cys [C]	2	9	
				N.D.	∞			contig reference	C	Ser [S]	2	9	
exon_1	2010496	2						start codon				1	

FIG. 2B

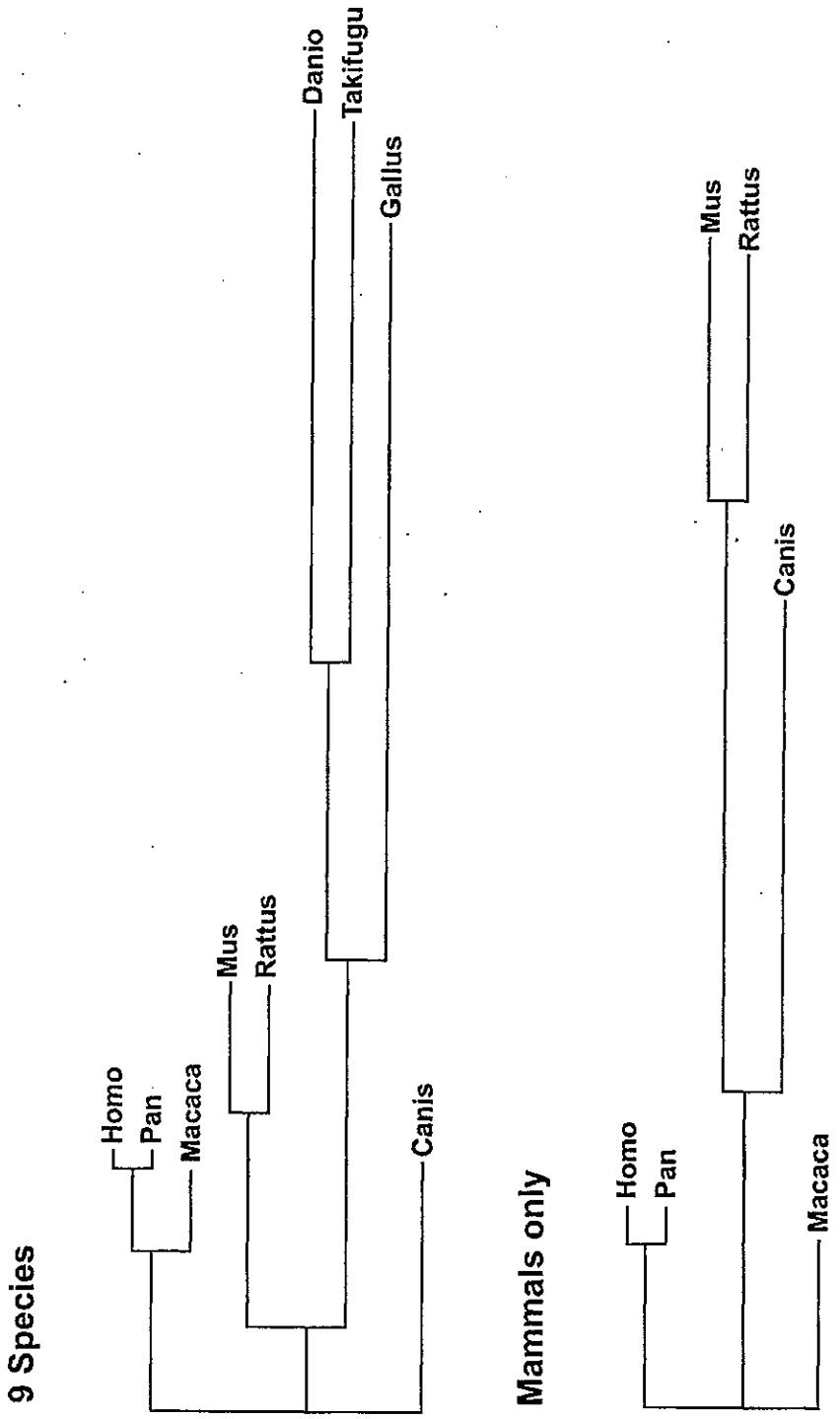

9 Species
Homo
Pan
Macaca
Mus
Rattus
Canis
Gallus
Takifugu
Danio
Mammals only
Homo
Pan
Macaca
Canis
Rattus
Mus

FIG. 3

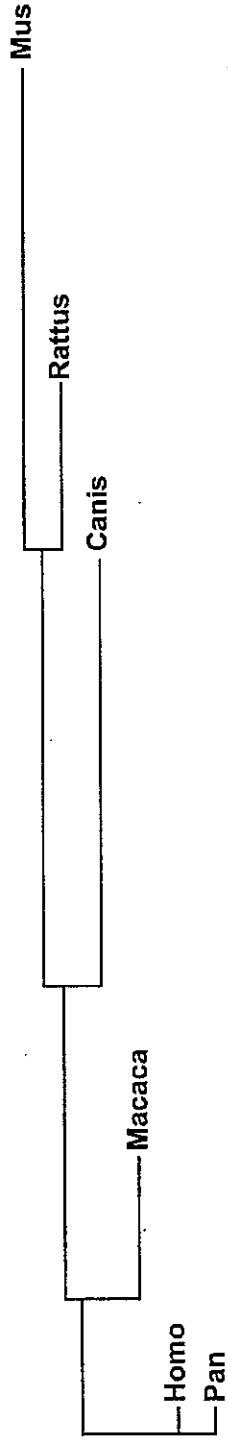


FIG. 4

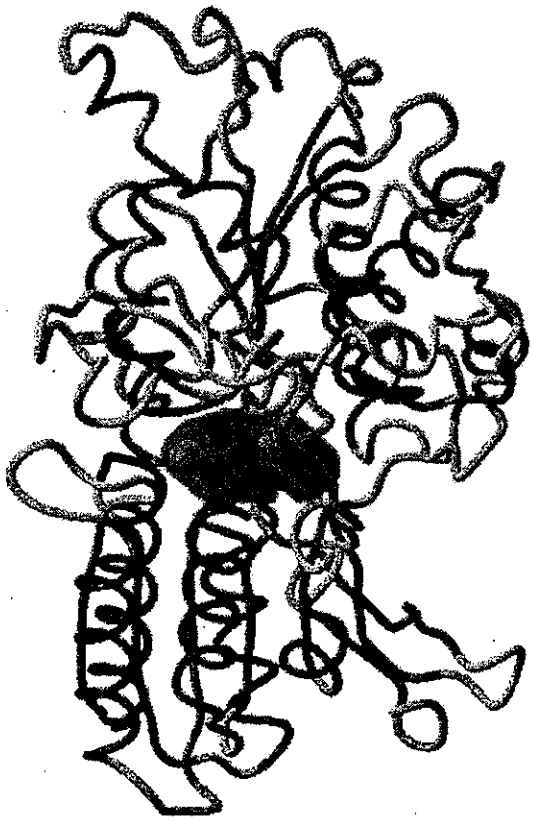


FIG. 5

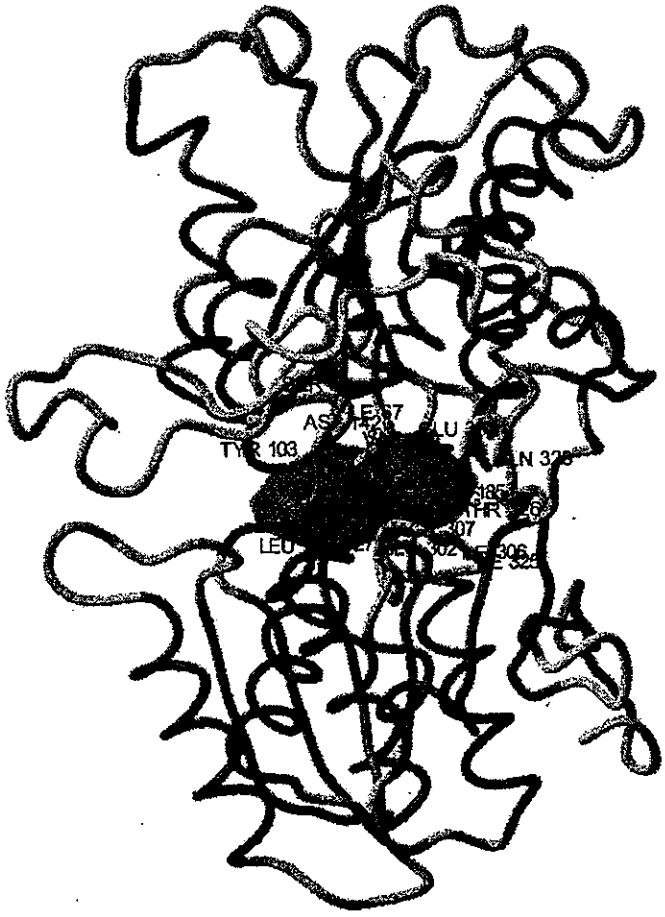


FIG. 6

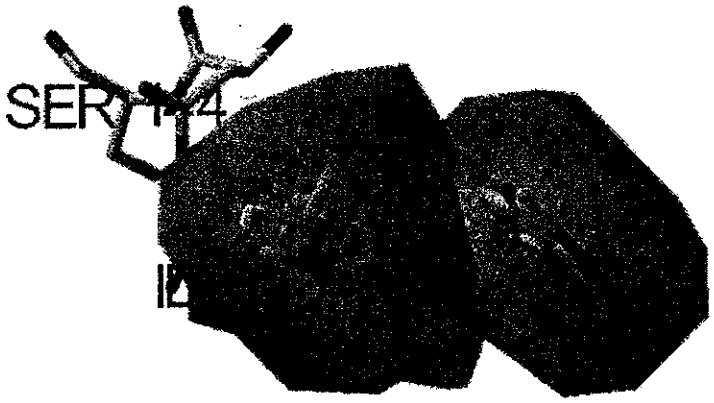


FIG. 7A

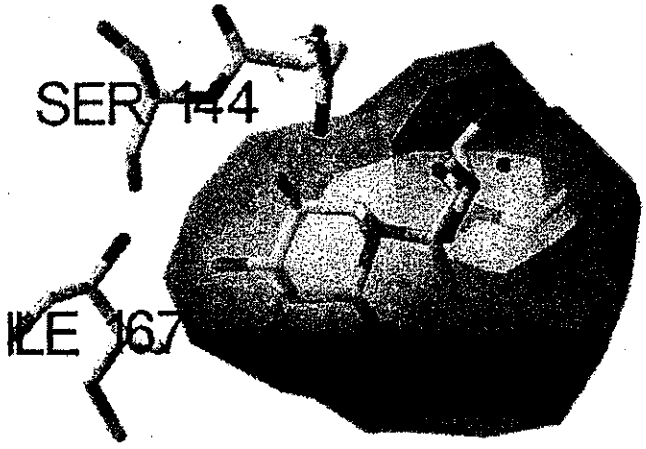


FIG. 7B

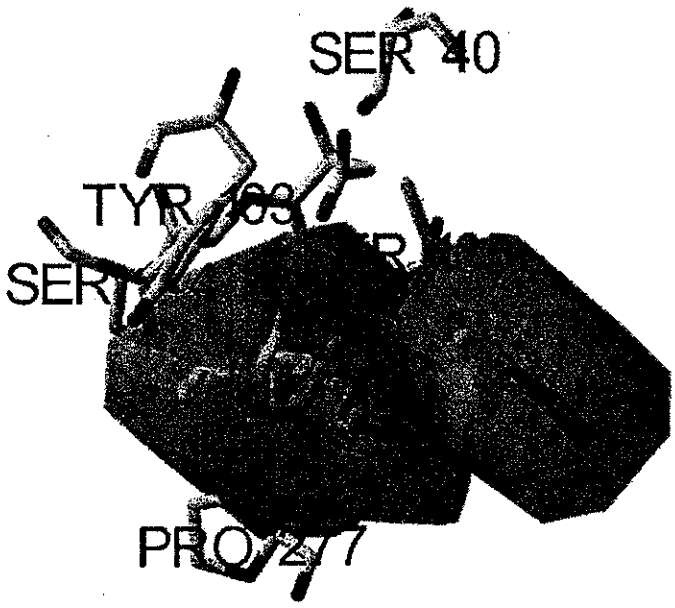


FIG. 8A

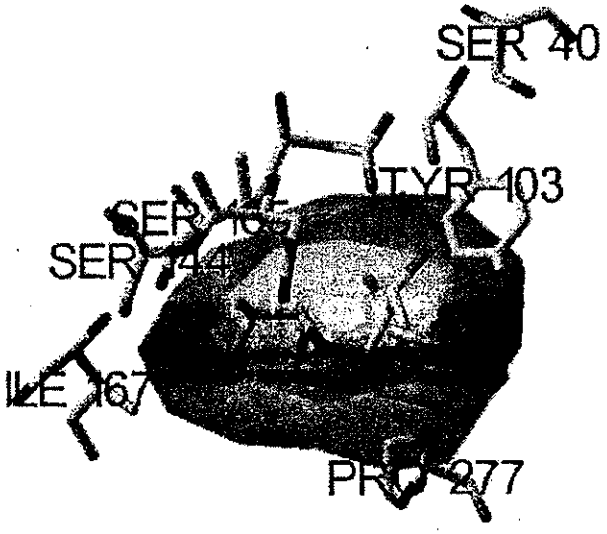


FIG. 8B

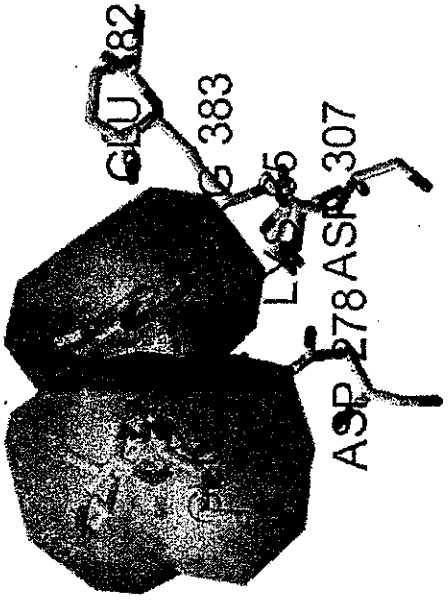


FIG. 9A

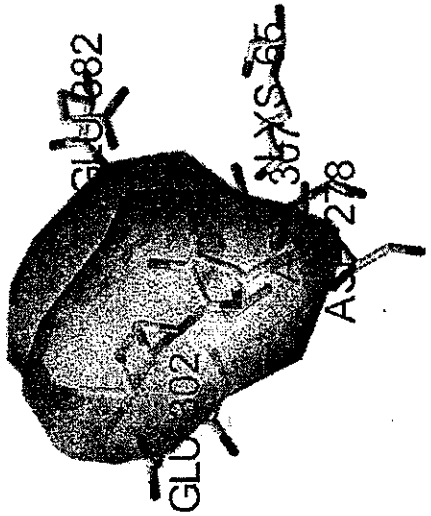


FIG. 9B

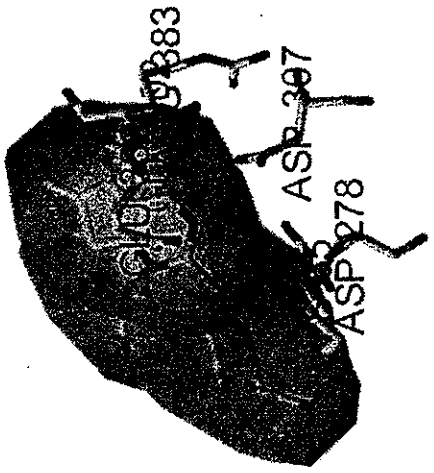


FIG. 9C

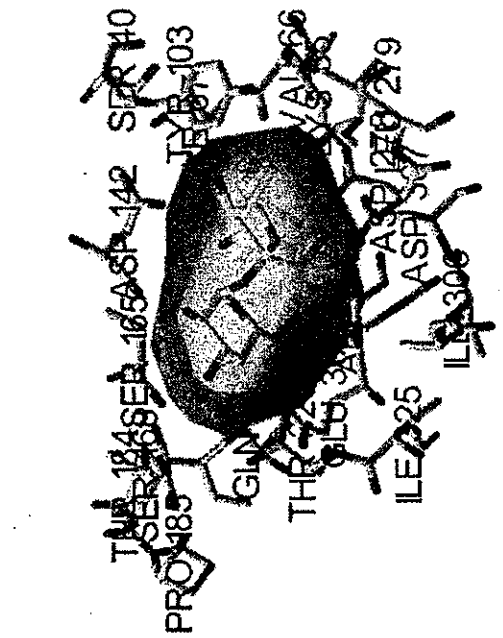


FIG. 10B

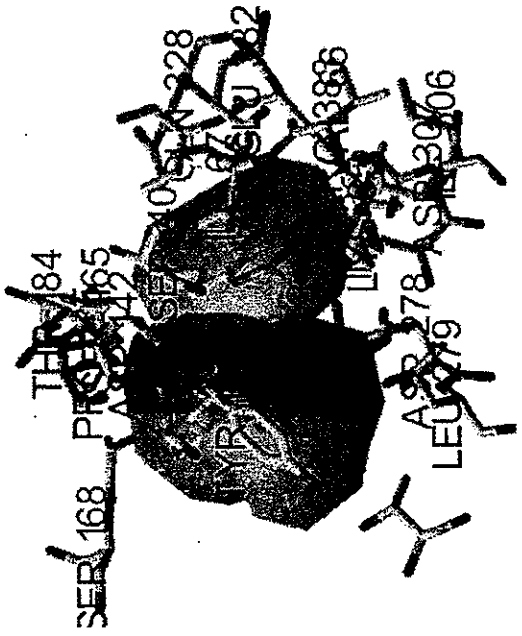


FIG. 10A

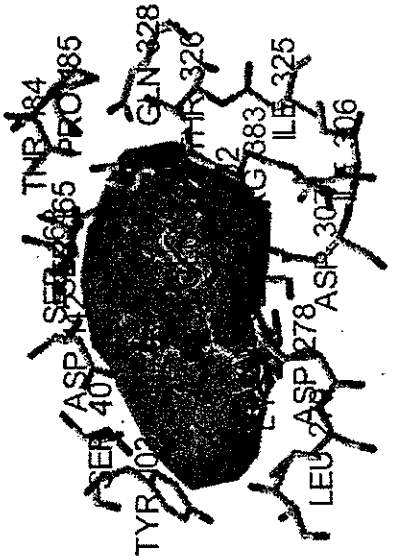


FIG. 10C

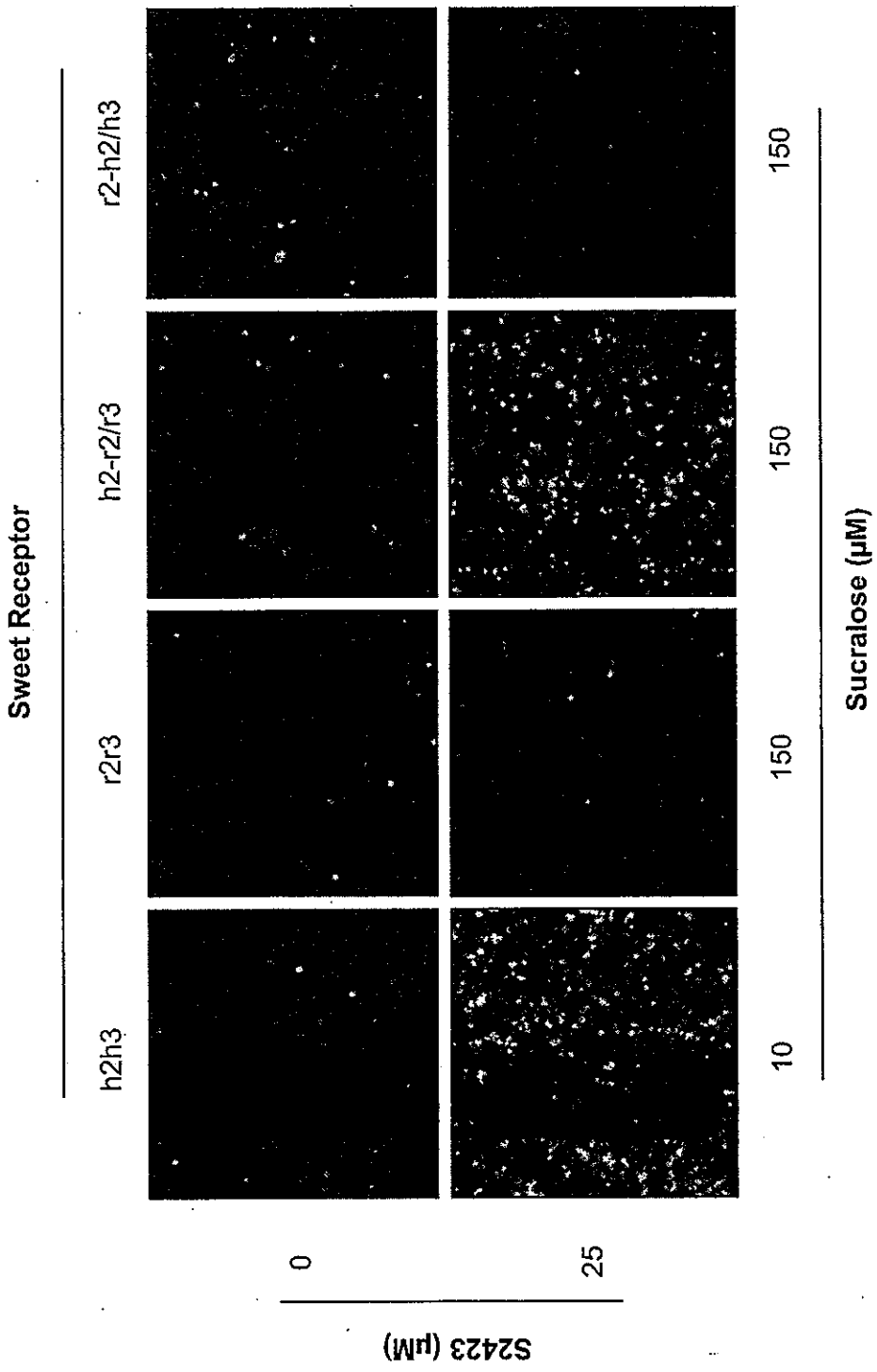

Sweet Receptor
h2h3
r2r3
h2-r2/r3
r2-h2/h3
10
150
150
150
Sucralose (μM)
0
25
S2423 (μM)

FIG. 11

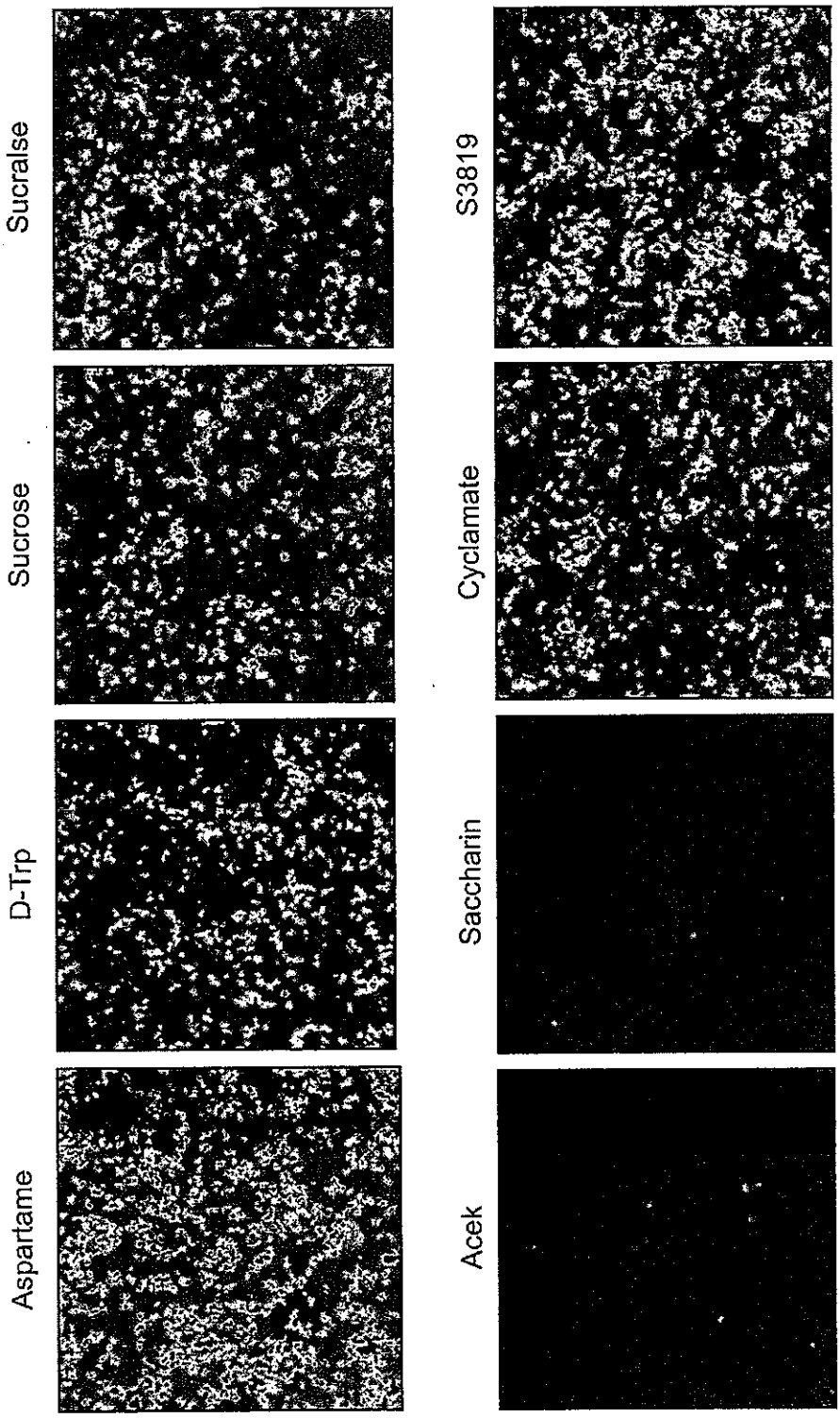

Sucralse
S3819
Sucrose
Cyclamate
D-Trp
Saccharin
Aspartame
Acek

FIG. 12