

1/34

<p>Trn5CORE HermesCORE IntegraseCORE MuCORE Mos1CORE</p>	<div> <div> <div>71</div> <div> <p>AEAIRKAGAMQTVKLAQEFPELLAI</p> <p>DAKEKKALIGREIKSAVEKDGASAT</p> <p>DCSPGIWQLDCETHL</p> <p>VEHLDAMQWINGDGYLH</p> <p>RIVTGDEKWI</p> </div> <div>102</div> </div> <div> <div>124</div> <div> <p>WWVHSVLLLEAT..TFRTVGL</p> <p>RNFLGVTLHYHENNELRD..L.</p> <p>KVILLVAHVVA...SG.Y.</p> <p>PKTWFWDVK...TR.KI</p> <p>TMLCVWWD.Q...SG.V.</p> </div> <div> <p>LHQ.EWW..MRPDDPADADEKE...</p> <p>ILGLKSL..DFE...RS...</p> <p>IEA.EVI...PA...E...</p> <p>LGW.RCD...VS...E...</p> <p>IYY.ELLKPGET...VNAARY</p> </div> <div> <p>DR...EAD..I...</p> <p>DR...G.AN.VV...</p> <p>DR...G.S.NFT...</p> <p>DNTRGAA.NKWL</p> <p>DNA.P.SH.T..ARA...</p> </div> <div> <p>IAVCDR...EAD..I...</p> <p>LSSII.KFVTTDR...V...</p> <p>P.VKTVHTDN...NFT...</p> <p>IPEDF.HITIDNT</p> <p>EYR.V.IFLH</p> </div> <div> <p>SR...L</p> <p>IFSQFNVED..LSSII</p> <p>GRW...P.VKTVHTDN...</p> <p>TRYG.IPEDF.HITIDNT</p> <p>RKRP.EYR.V.IFLH</p> </div> <div> <p>AAAT.SR...L</p> <p>KKLKAIFSQFNVED..LSSII</p> <p>YFLK.LA..GRW...P.VKTVHTDN...</p> <p>LSFMD.VV...TRYG.IPEDF.HITIDNT</p> <p>NLNRA.LQ...RKRP.EYR.V.IFLH</p> </div> <div> <p>AHNERFVVRSKHPRK...</p> <p>...NIRINKLSKLALSLLSIPA..</p> <p>WWAGIKQEFGMNKEL...</p> <p>L.MGAKMHWTSVVAGKGWGQAKPVERA</p> <p>...NWEVLPHAAAYSPDLAPSDY...</p> </div> <div> <p>223</p> <p>DVESGLY</p> <p>SSASERTFSLAGN</p> <p>KKIIGQV</p> <p>FGVGGLEEYVDK</p> <p>HLFASMGHALAEQR</p> </div> </div> </div>	<div> <div> <div>342</div> <div> <p>MEEPDNLERM</p> <p>NR...IGQQTVD</p> <p>DQA.EHLKTA</p> <p>P...LFLKTM</p> <p>DSY.ESVKKWA</p> </div> <div>372</div> </div> <div> <p>VSILSF</p> <p>DSLLFF</p> <p>IQMAVF</p> <p>MAEGVAMFN</p> <p>ADEWFAM</p> </div> <div> <p>VAVRLLQLRESF</p> <p>LNSFYKNF</p> <p>IHN...</p> <p>MFN...</p> <p>AKDDEFYWRGIH</p> </div> <div> <p>TP</p> <p>...</p> <p>...</p> <p>...</p> <p>...</p> </div> </div>
--	--	--

Fig. 1A

2/34

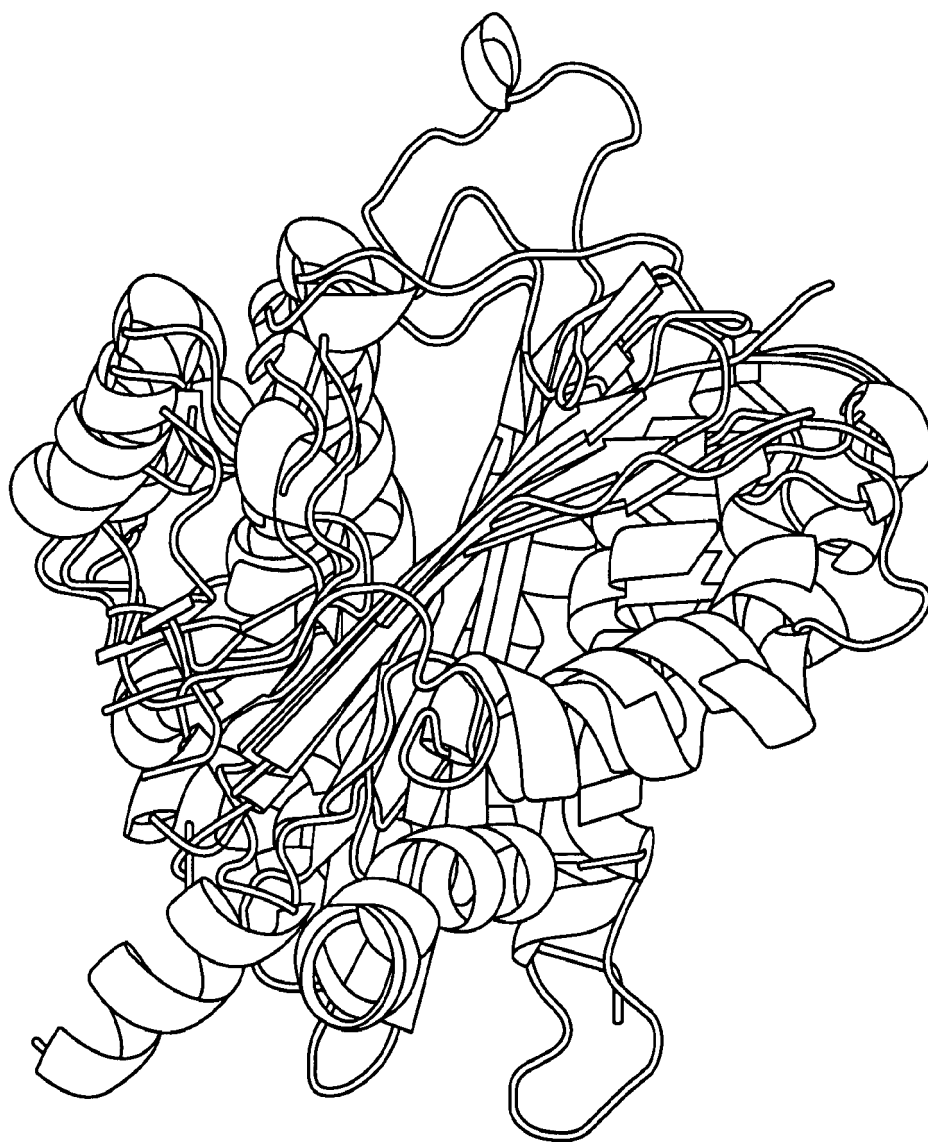


Fig. 1B

3/34

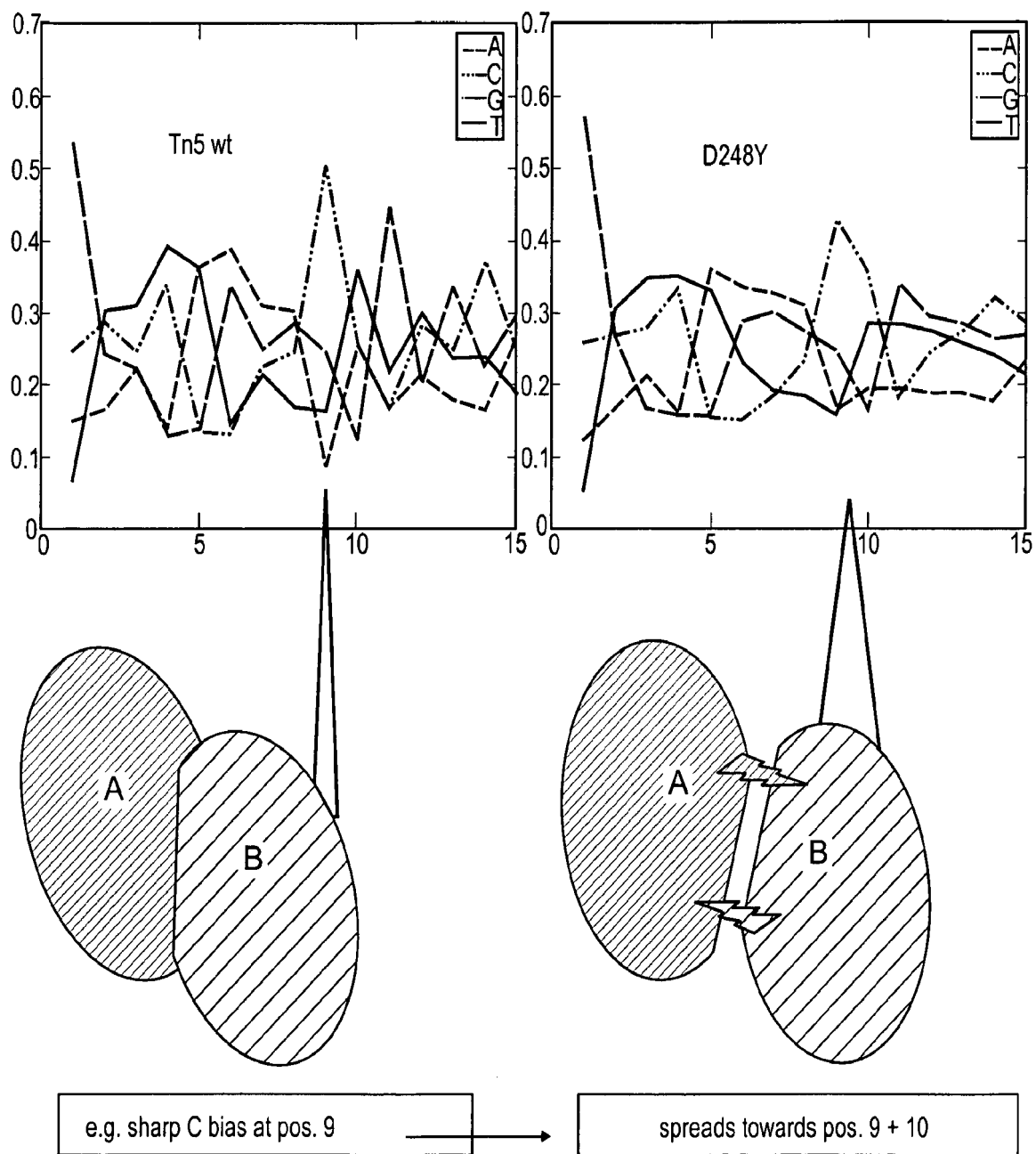


Fig. 2

4/34

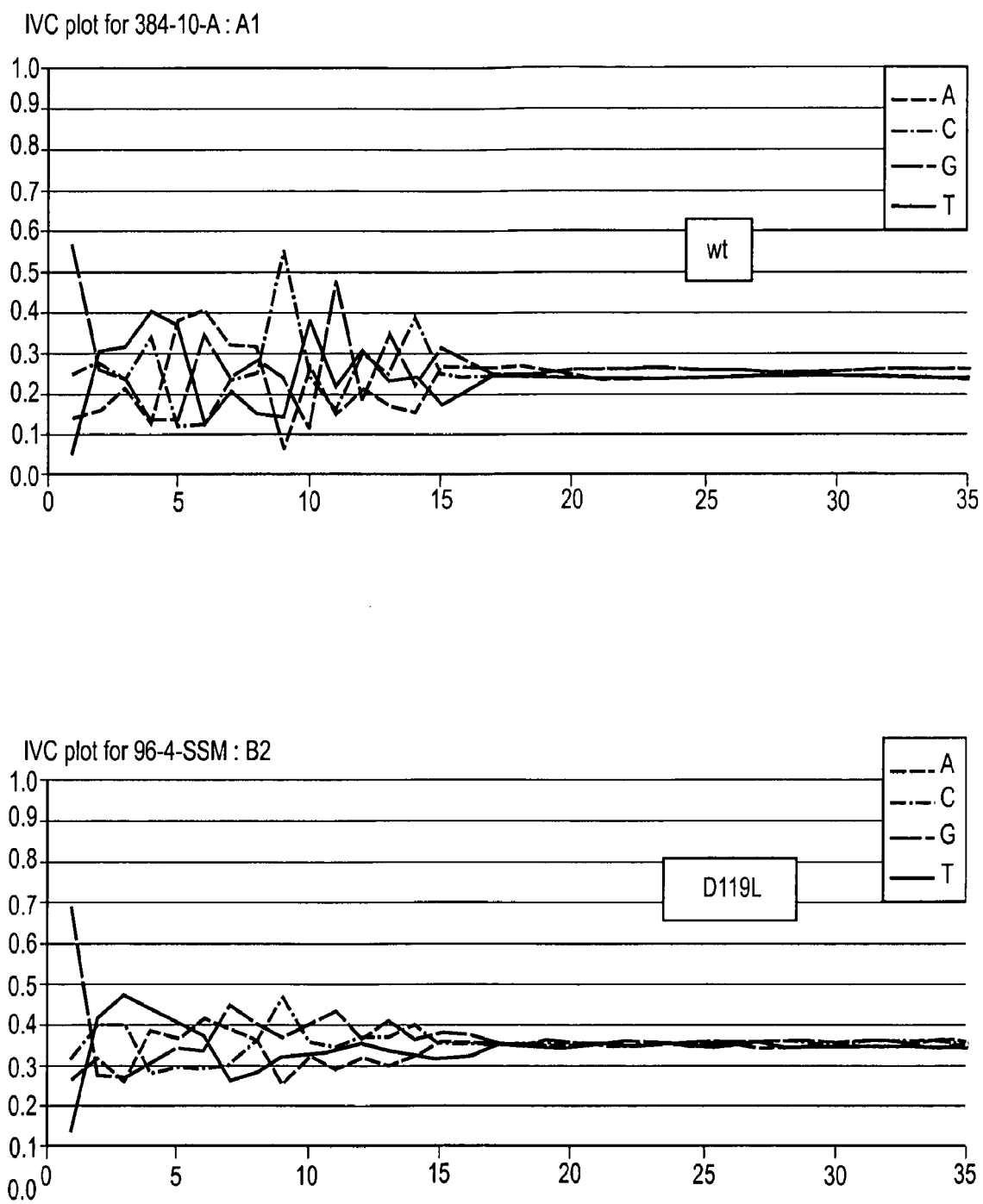


Fig. 3

5/34

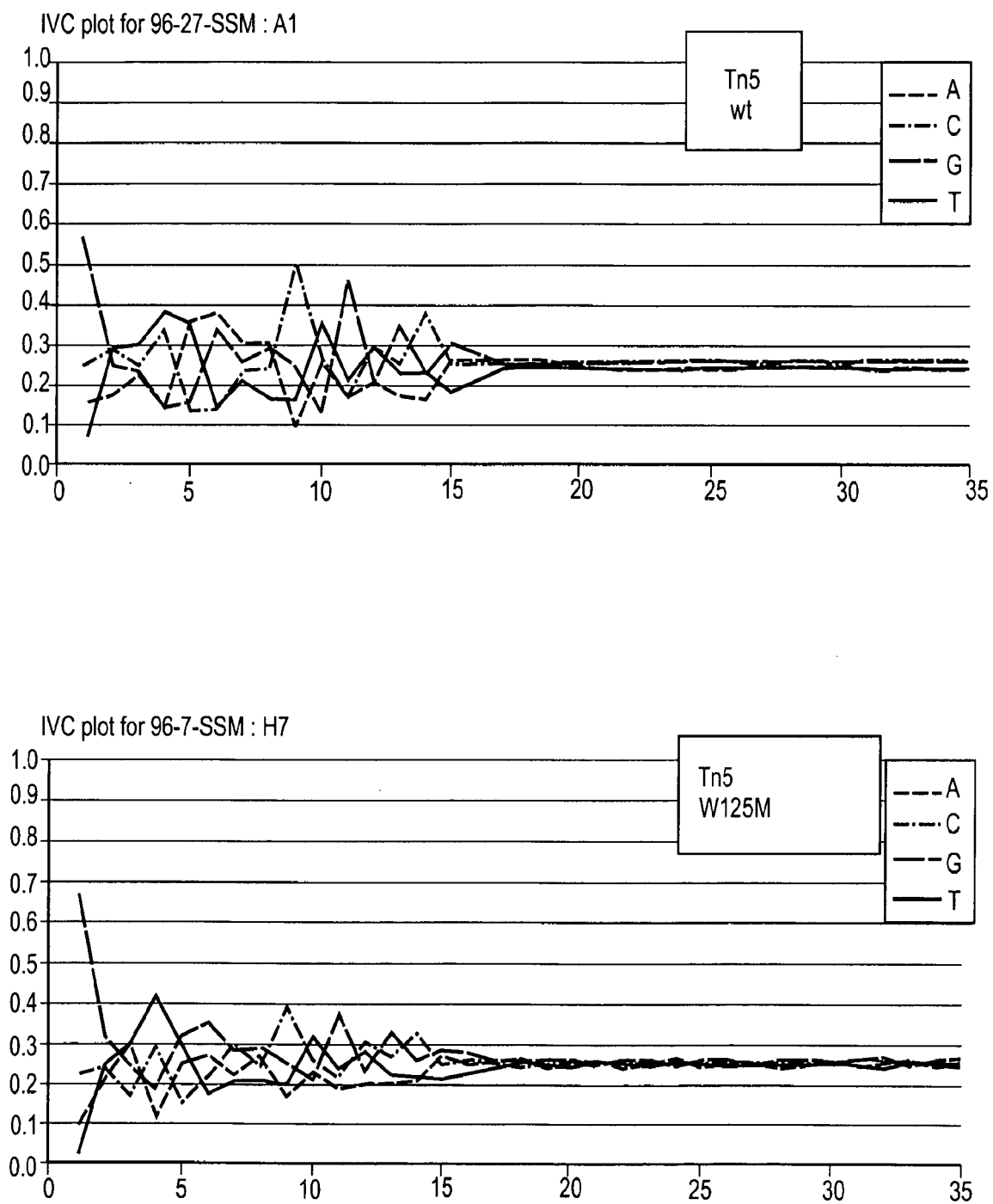


Fig. 4

6/34

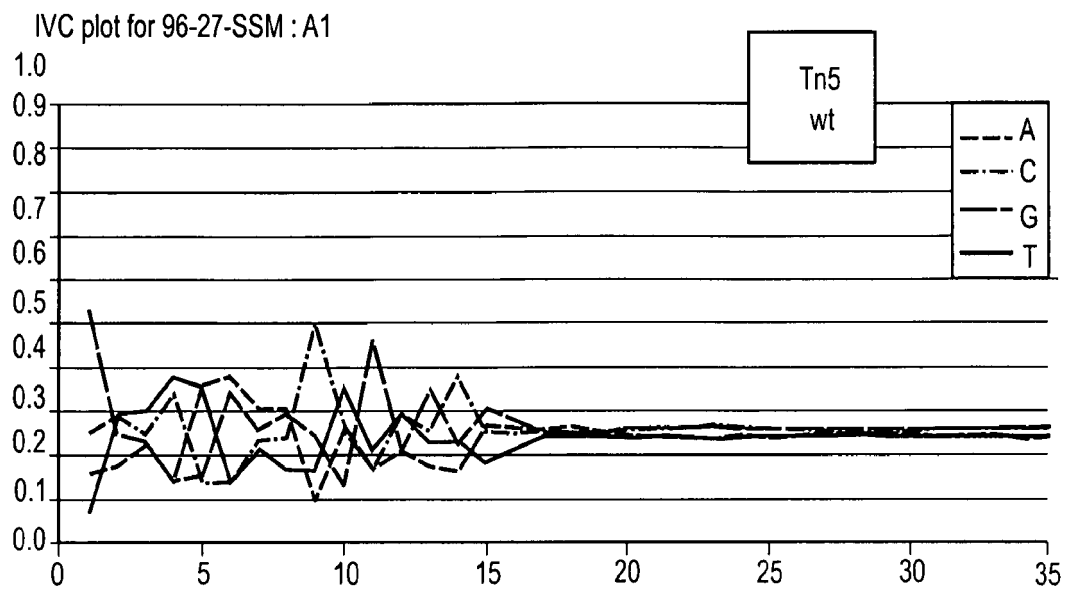
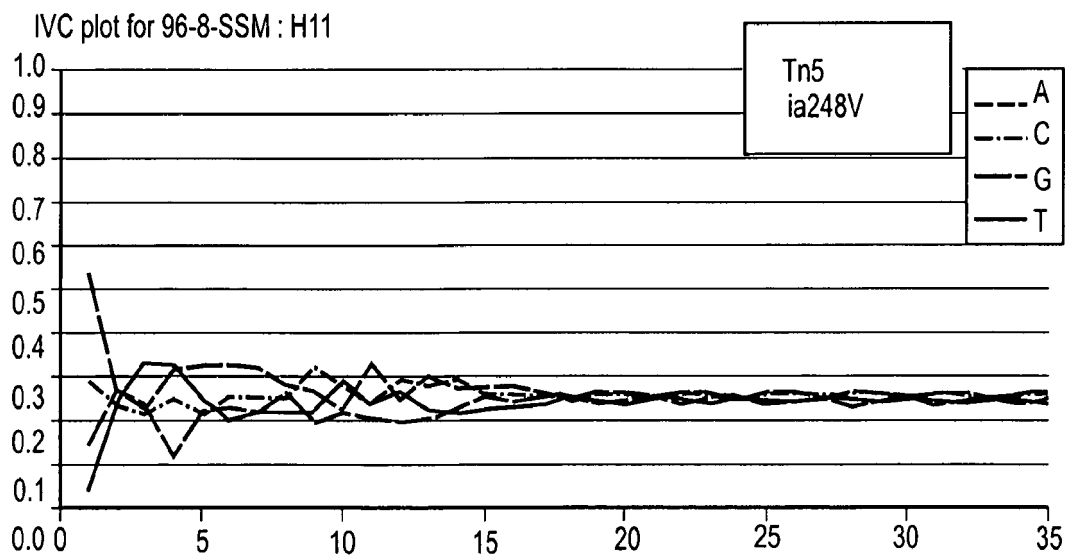


Fig. 5

7/34

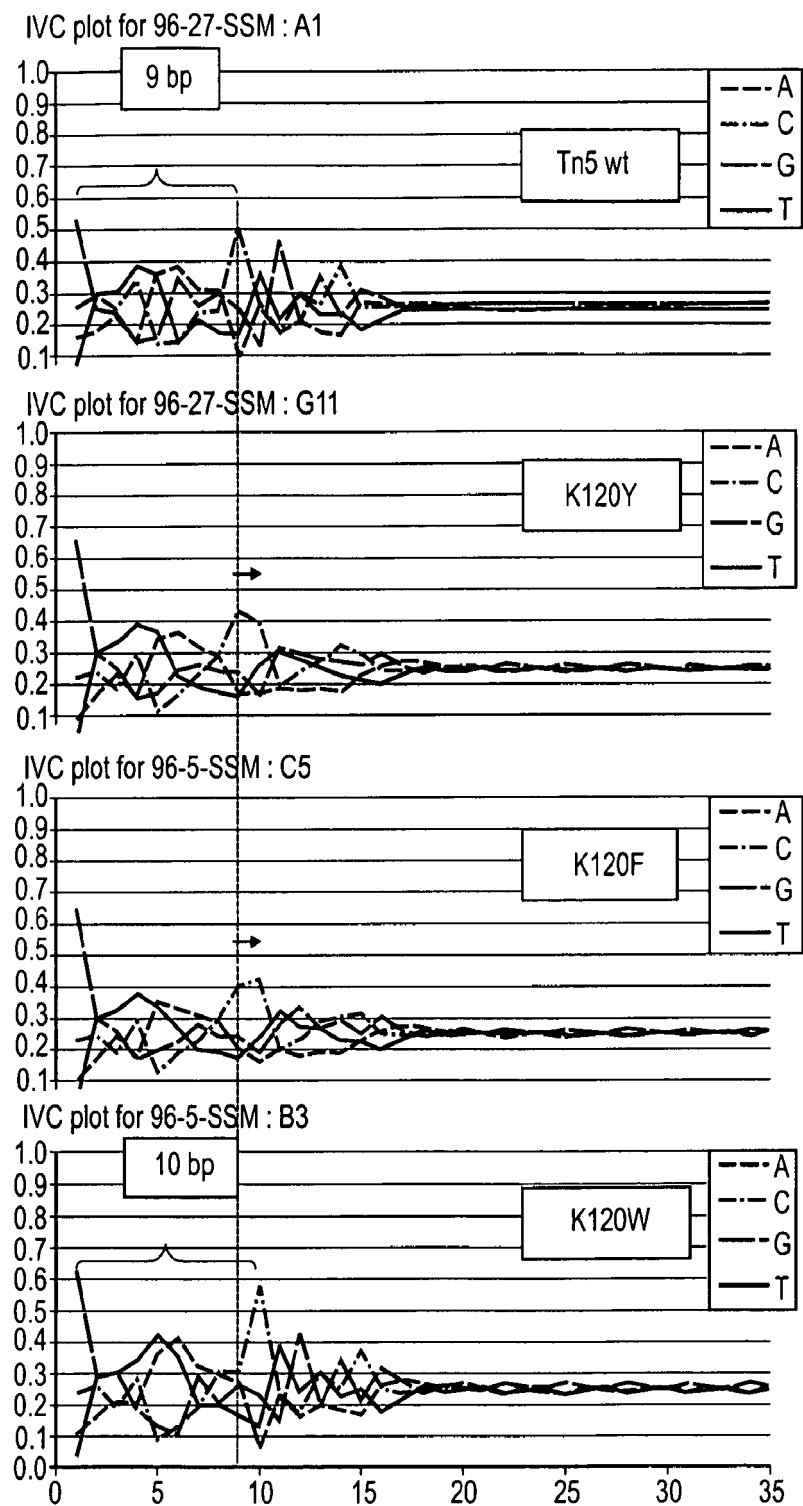


Fig. 6

8/34

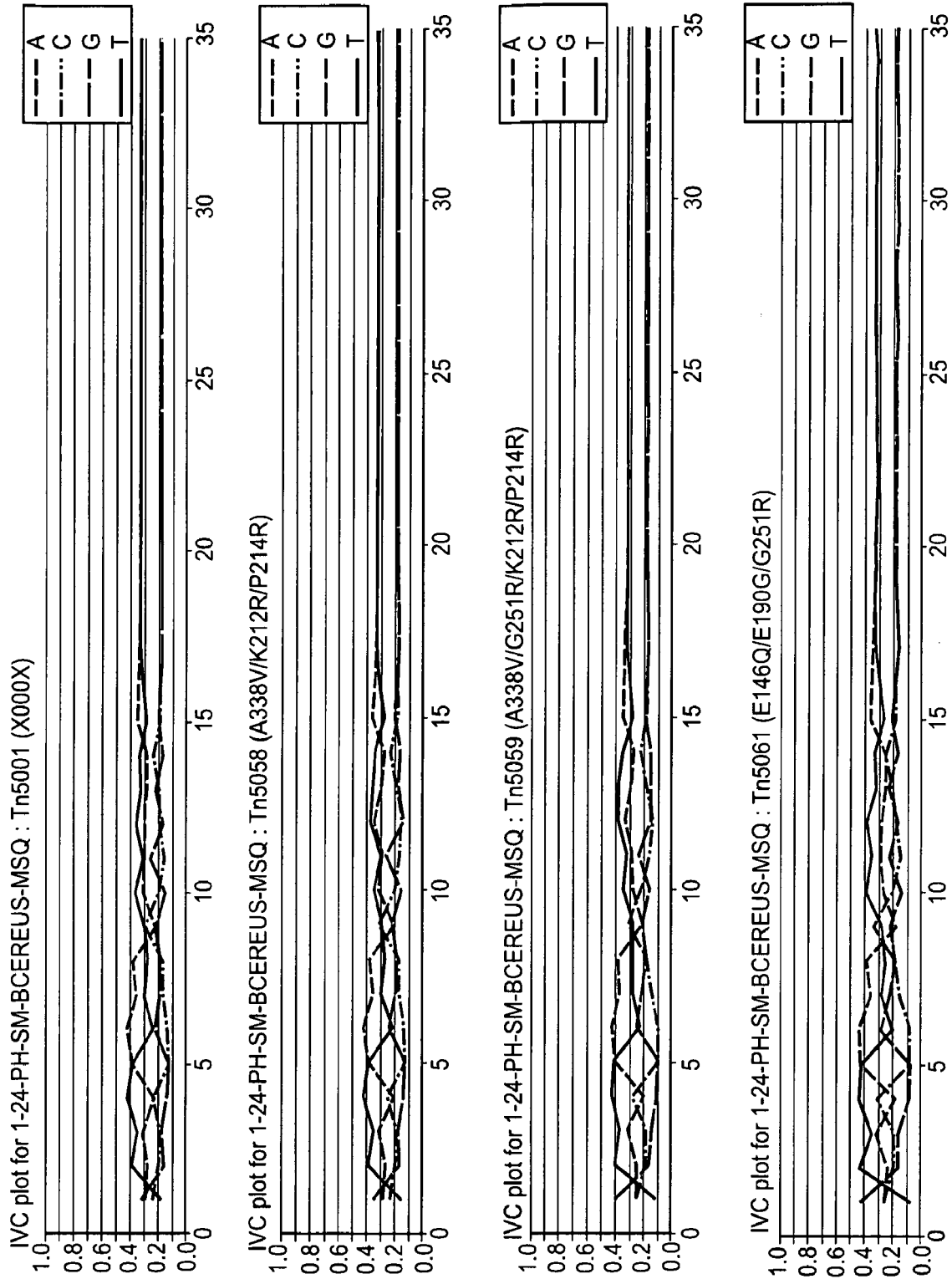


Fig. 7

9/34

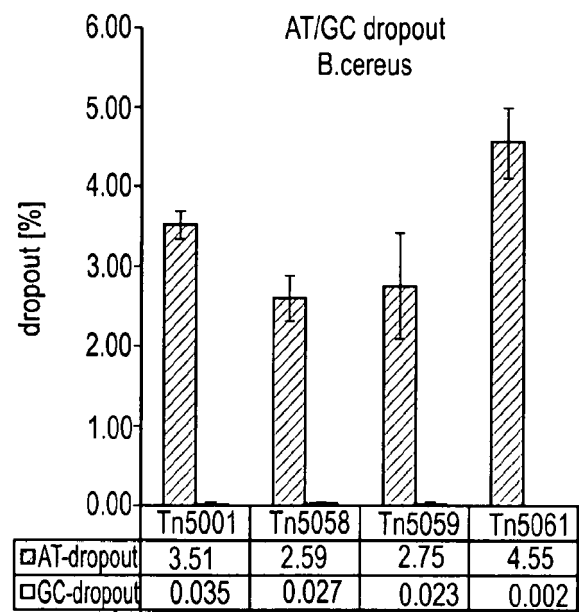


Fig. 8A

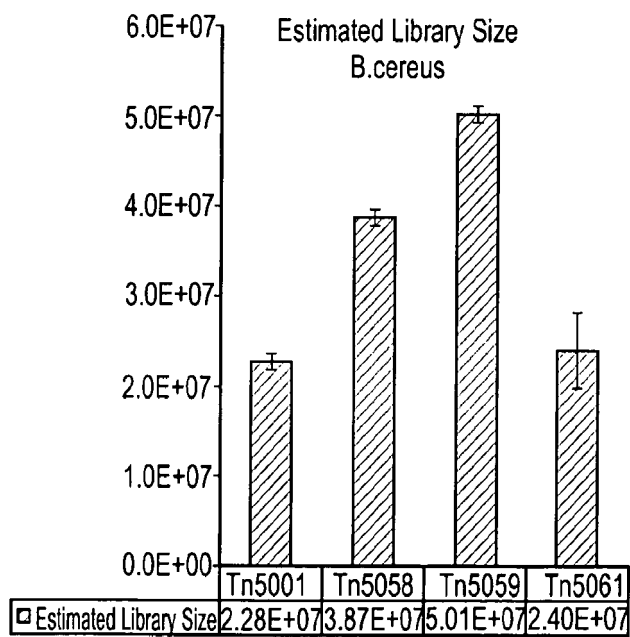


Fig. 8B

10/34

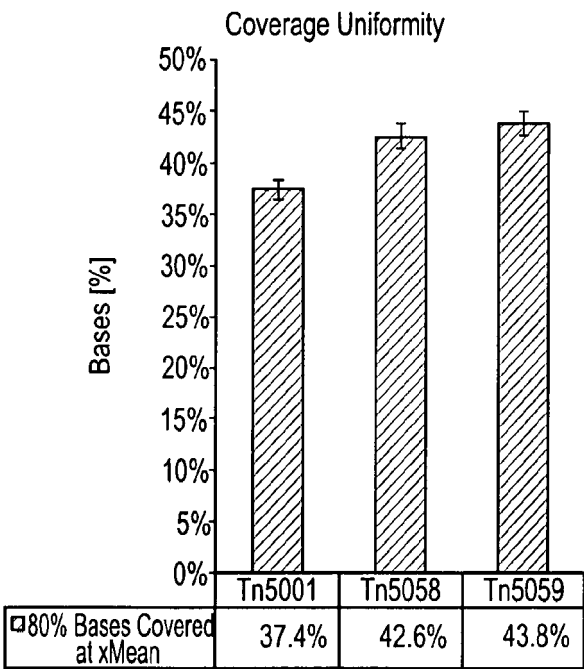


Fig. 9A

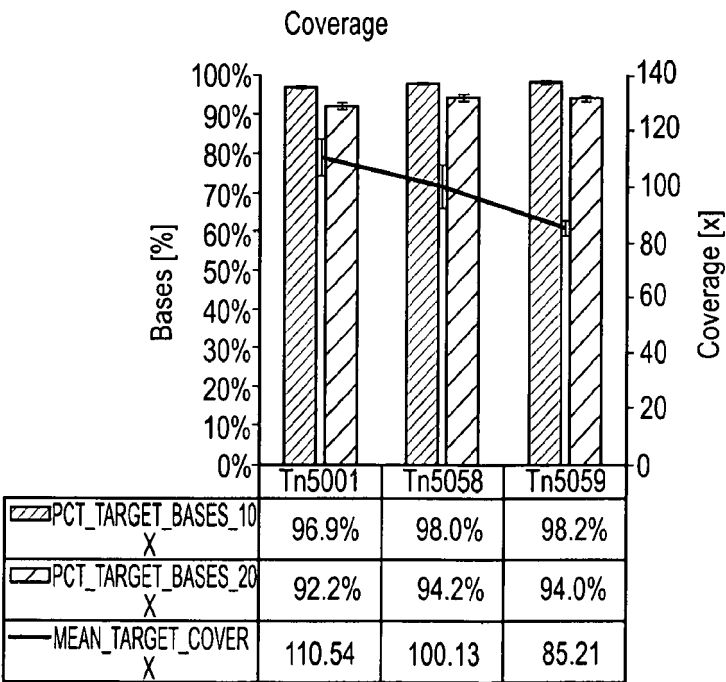


Fig. 9B

11/34

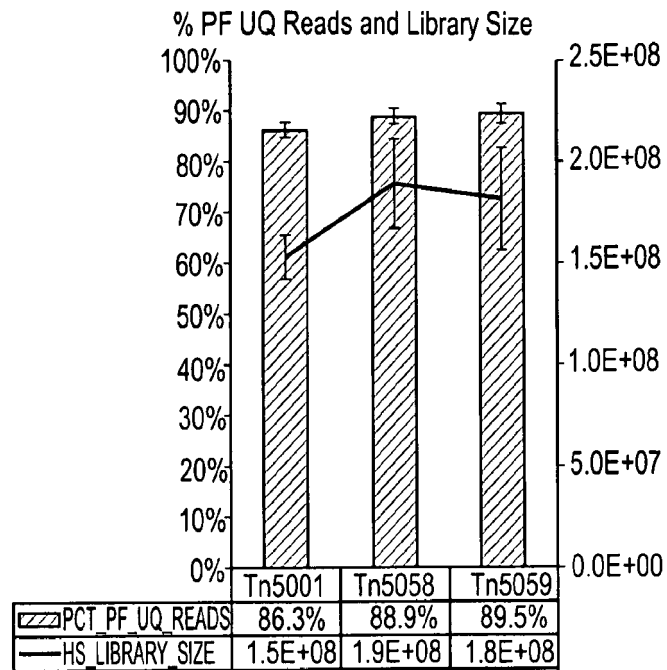


Fig. 10A

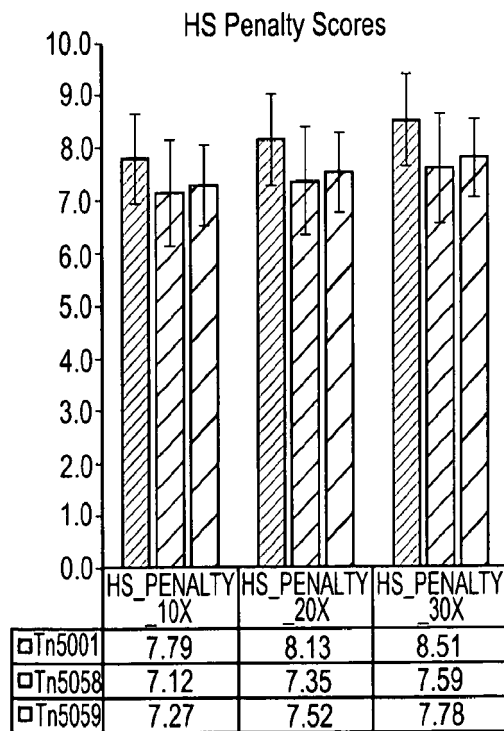


Fig. 10B

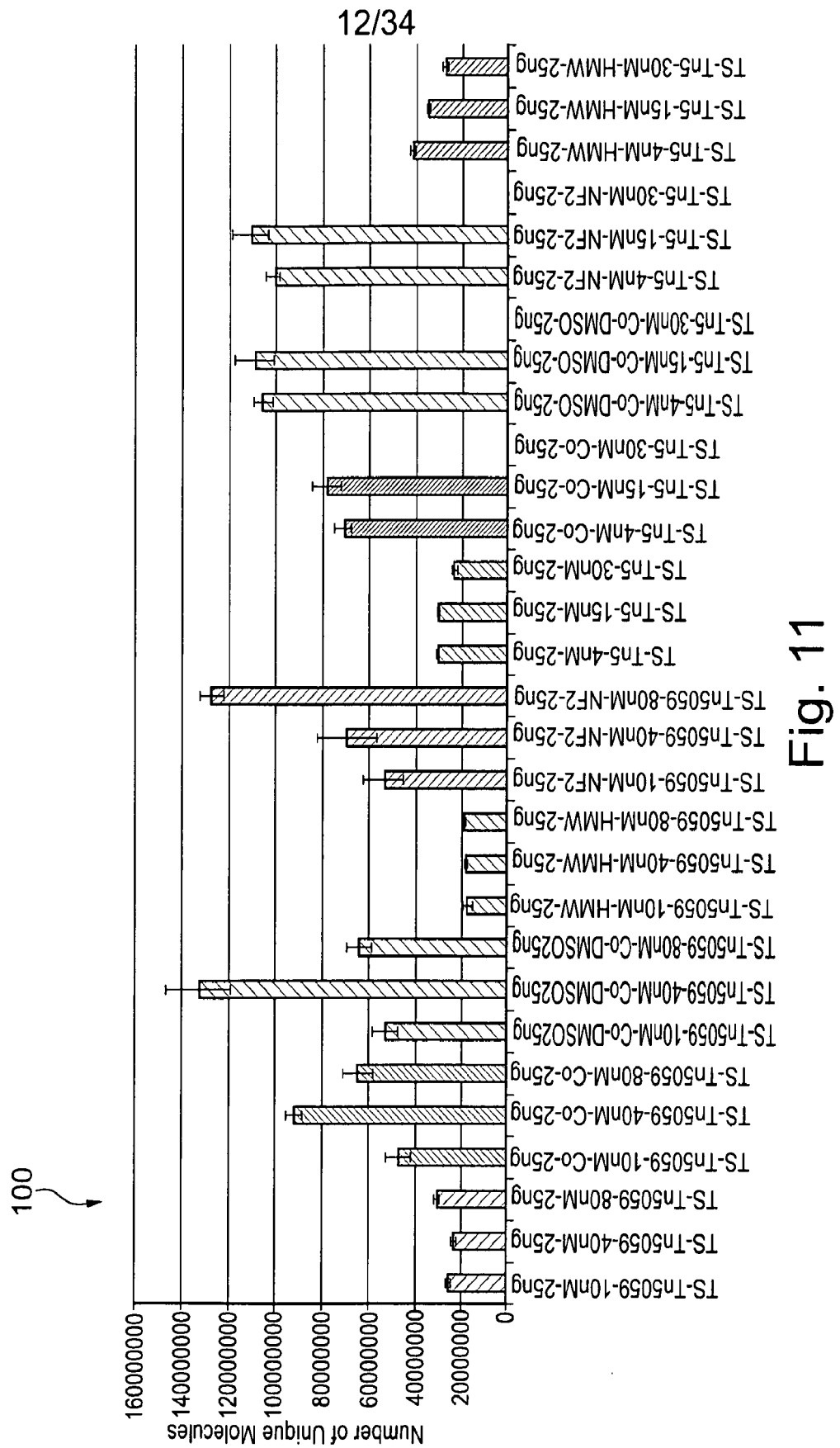


Fig. 11

13/34

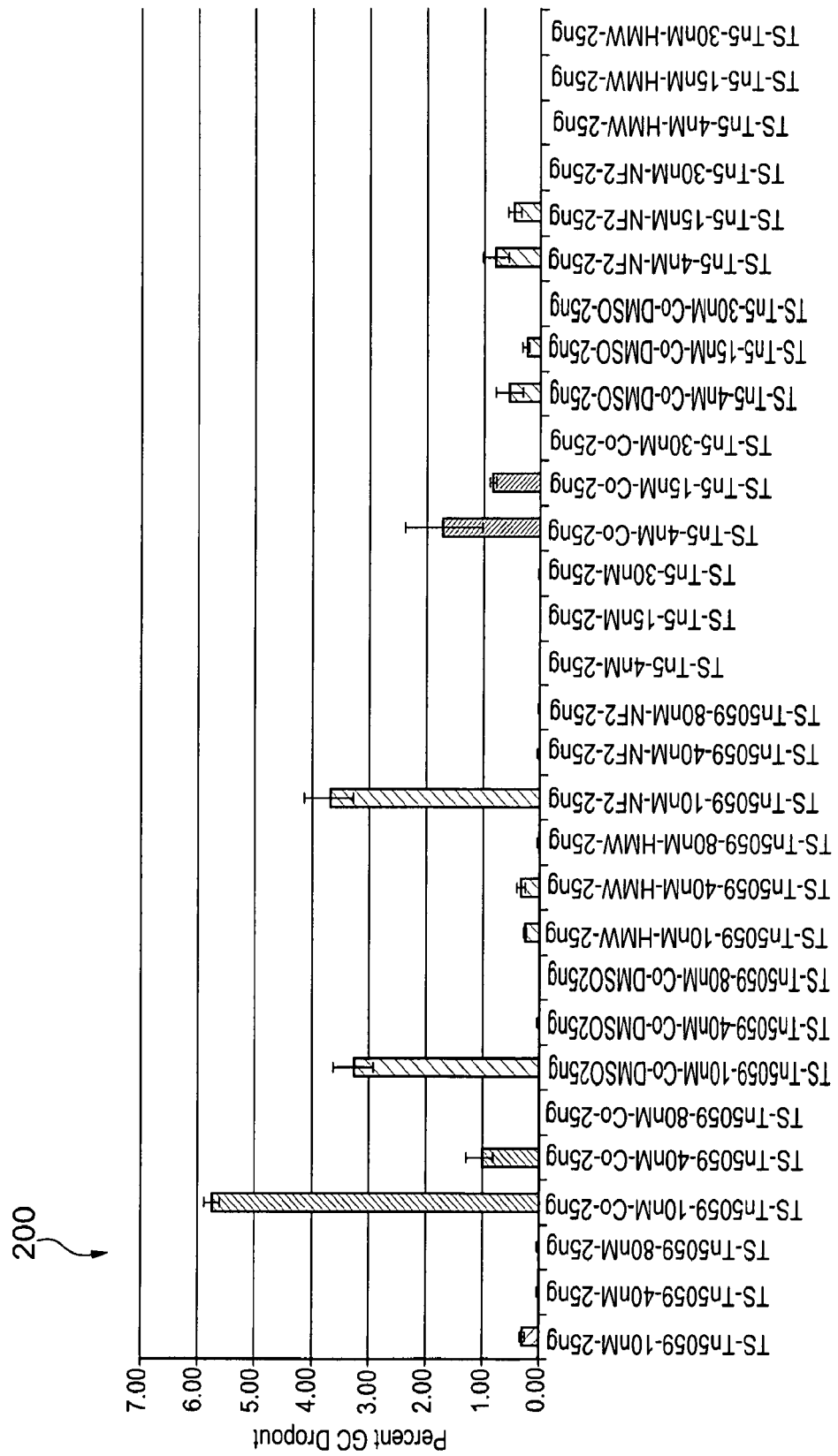


Fig. 12

14/34

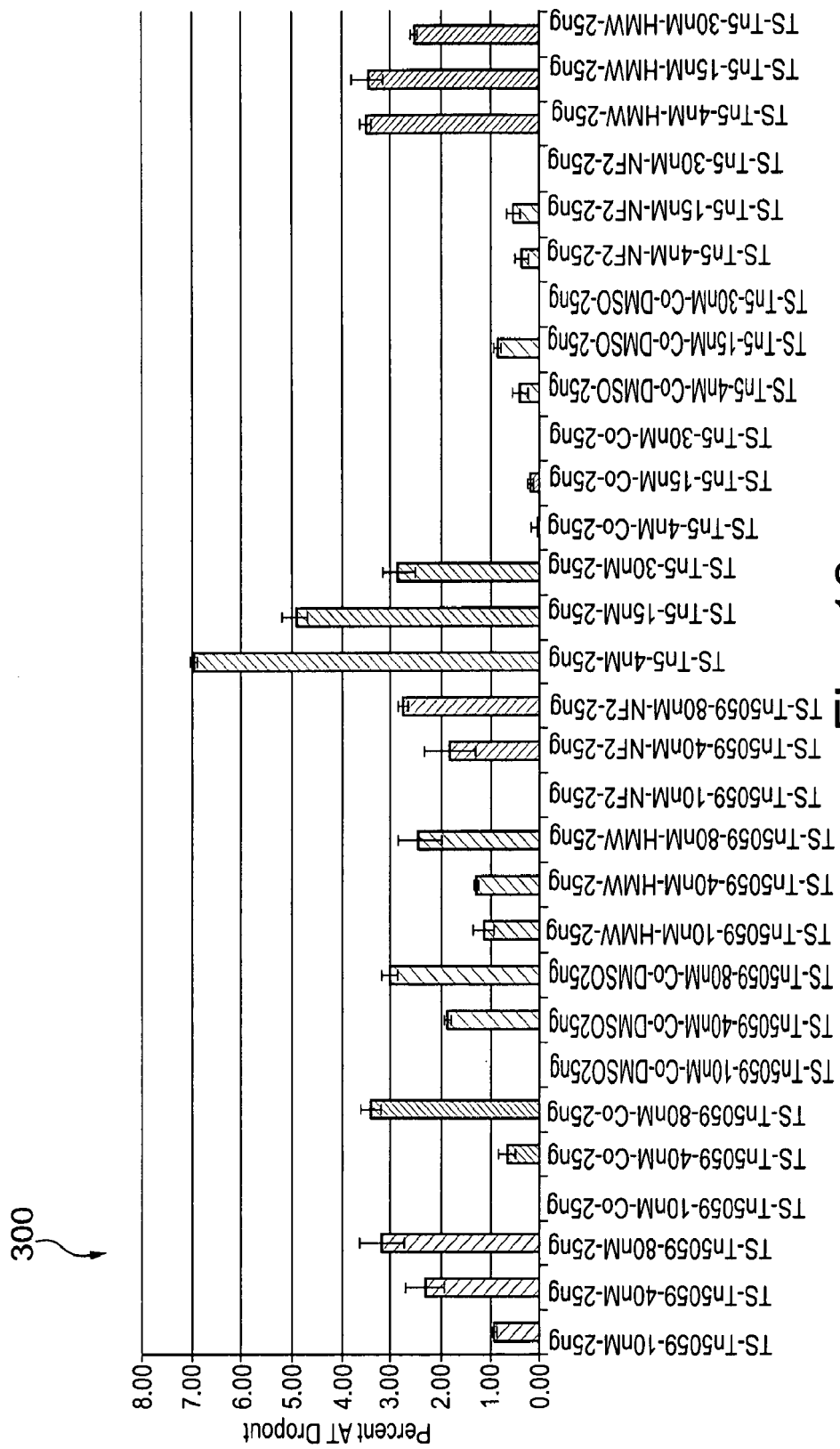


Fig. 13

15/34

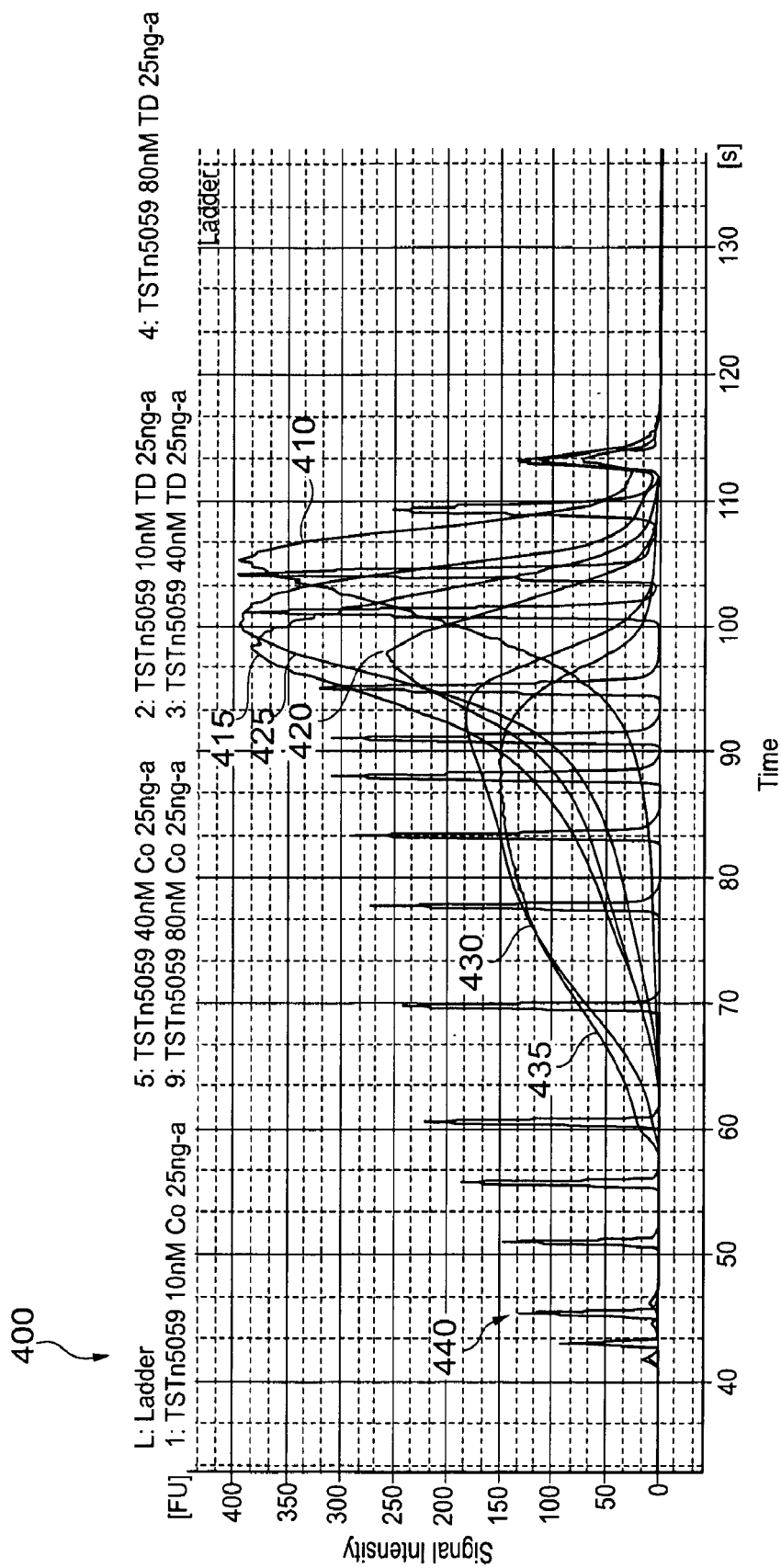


Fig. 14

16/34

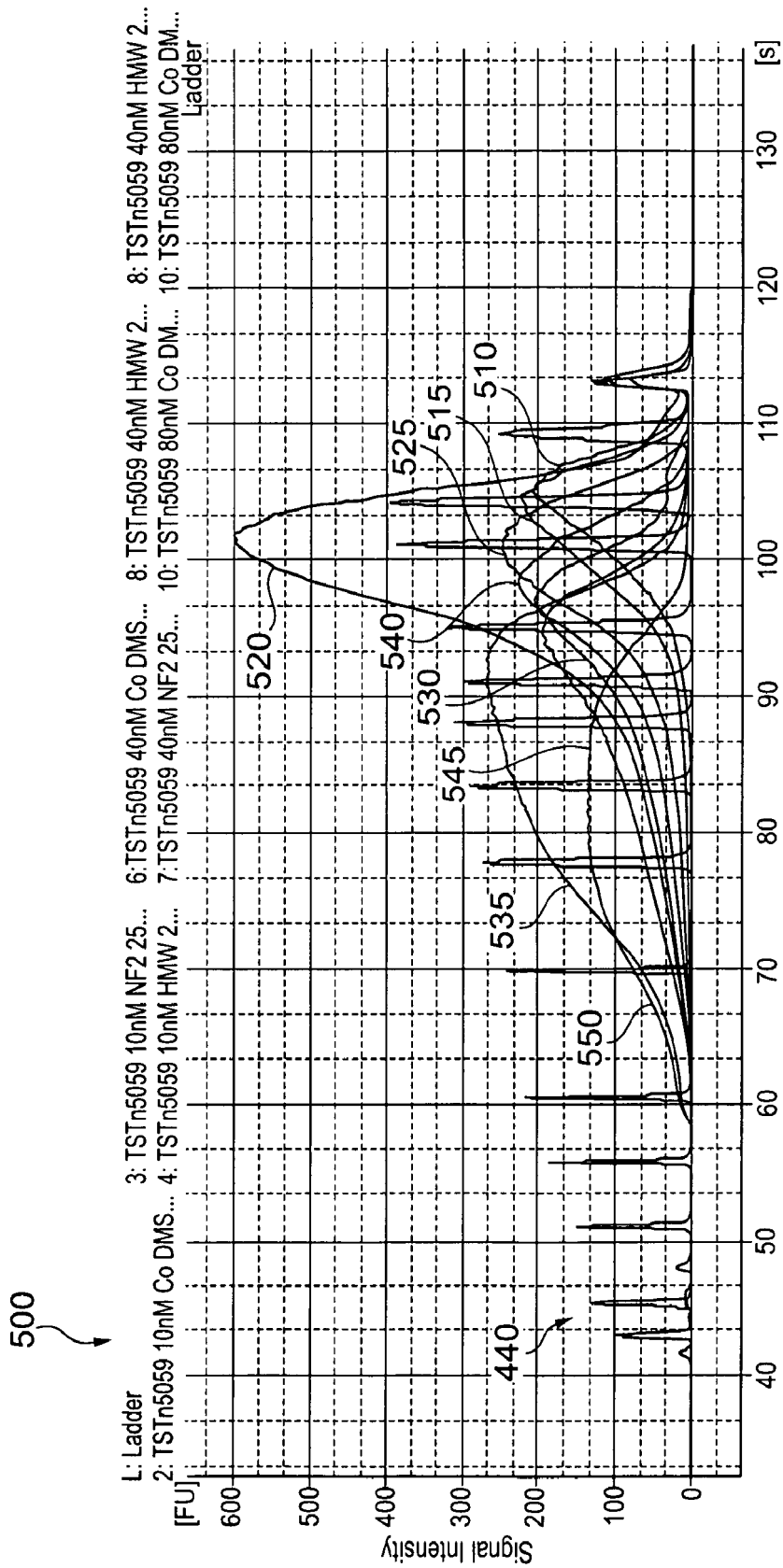


Fig. 15

17/34

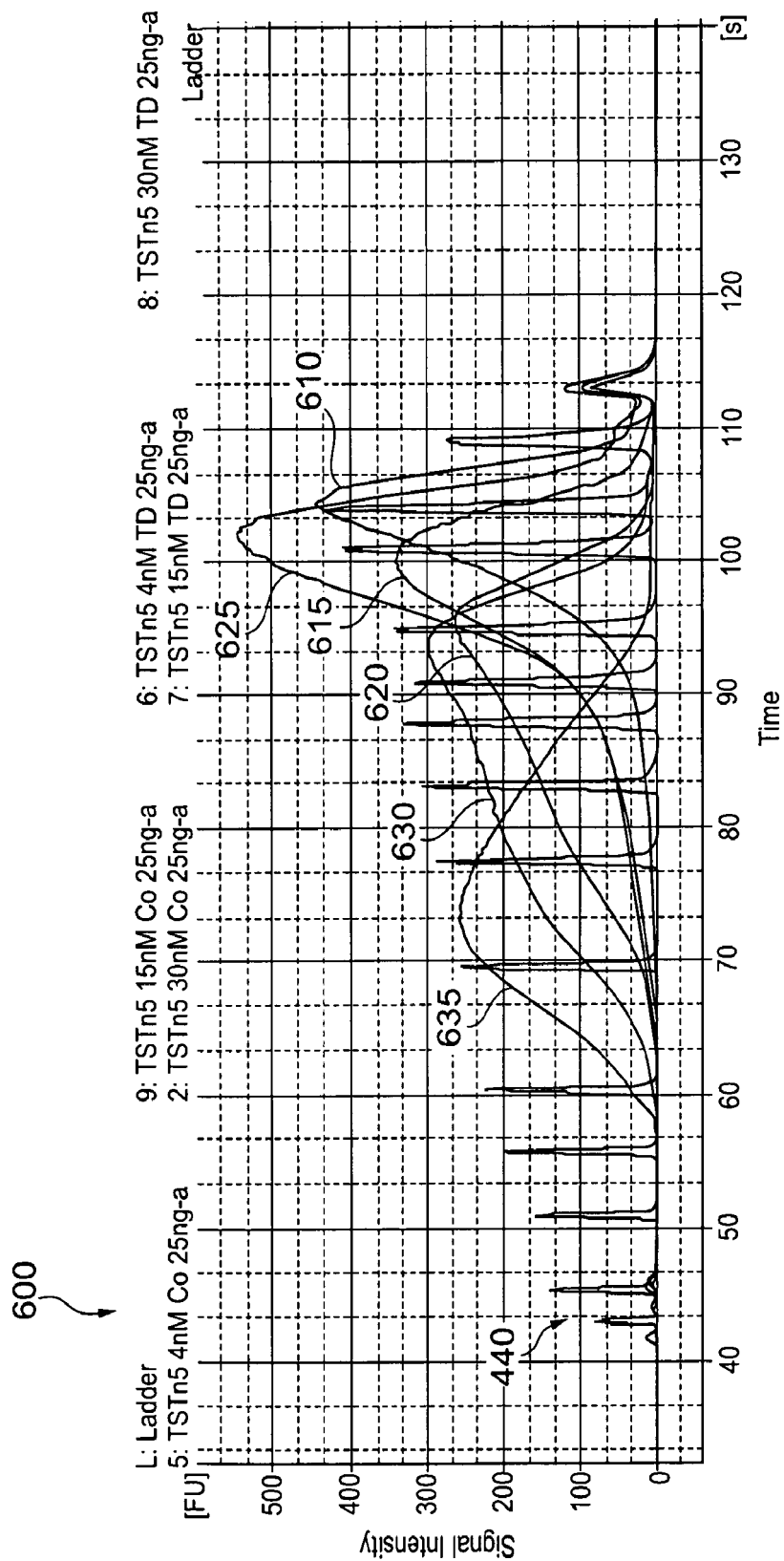
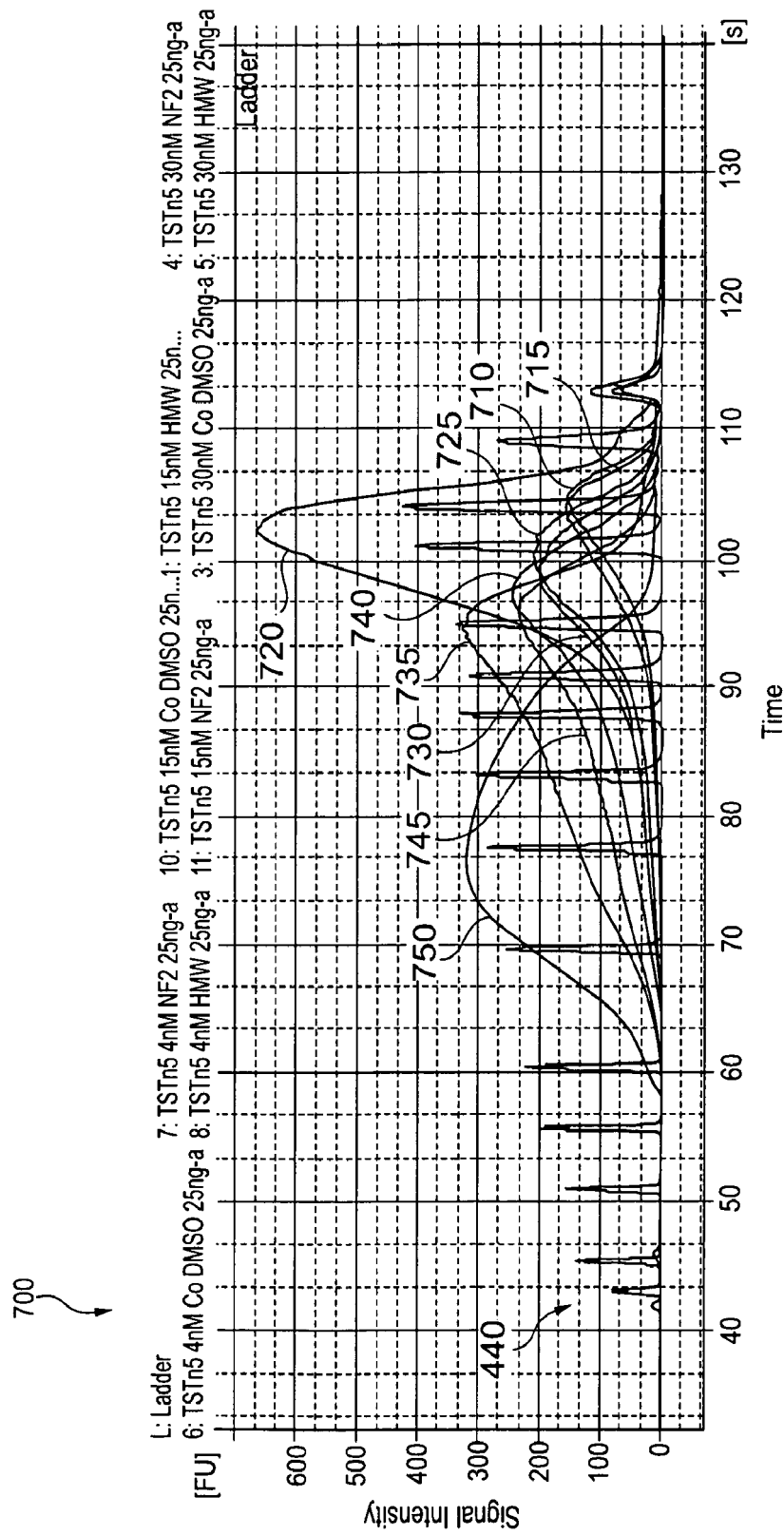


Fig. 16



19/34

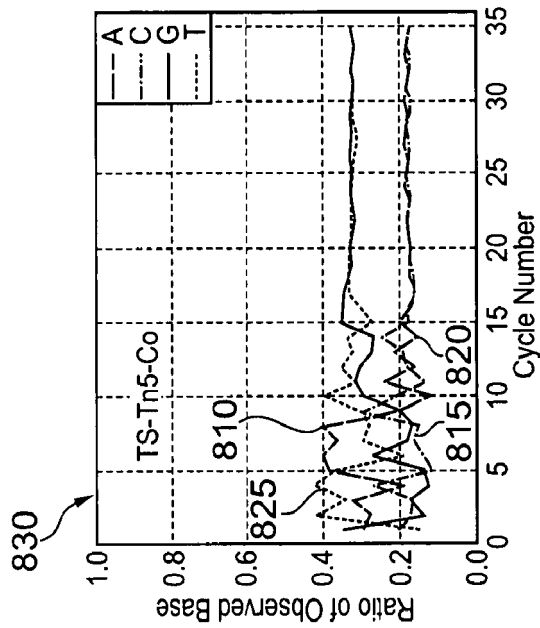


Fig. 18B

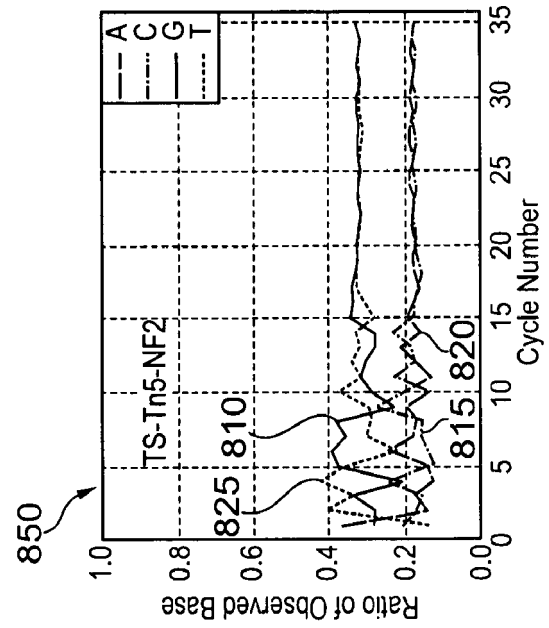


Fig. 18D

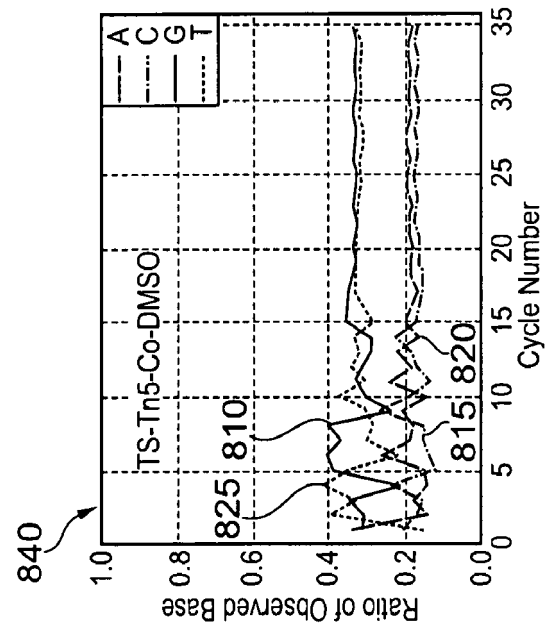
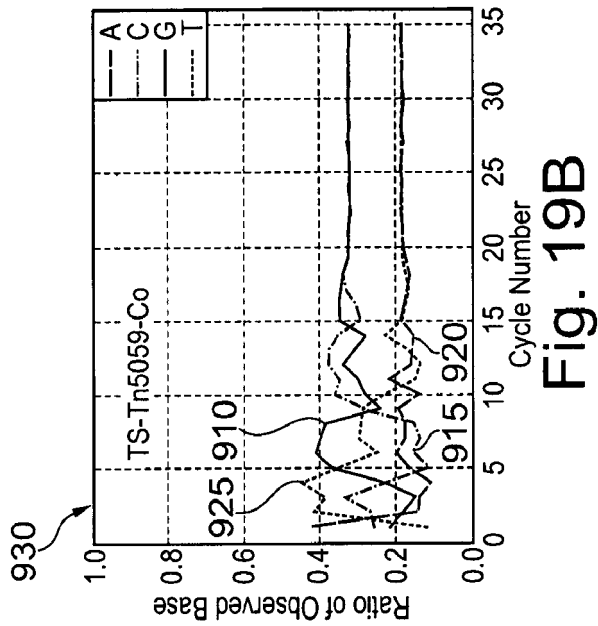
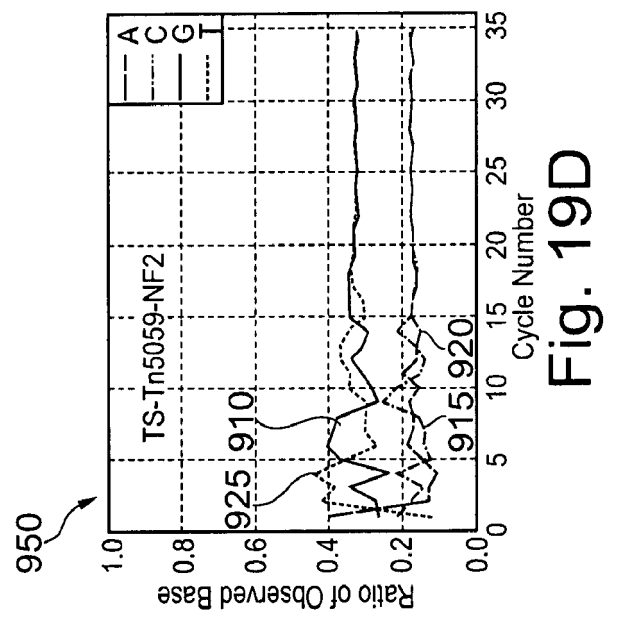
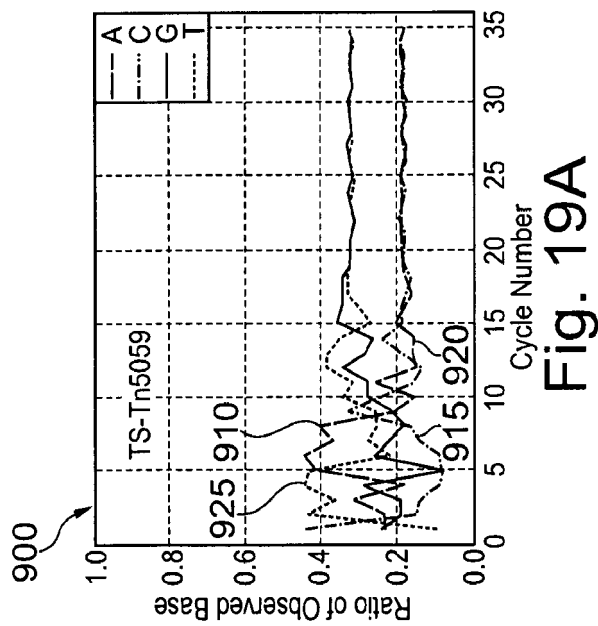
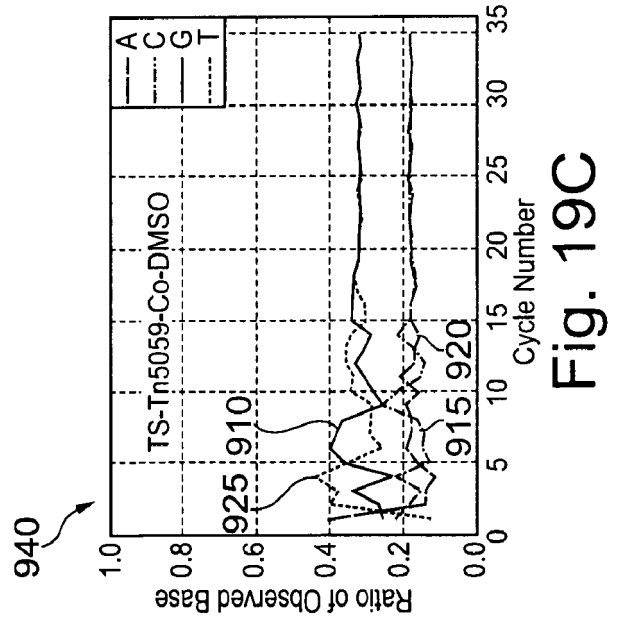
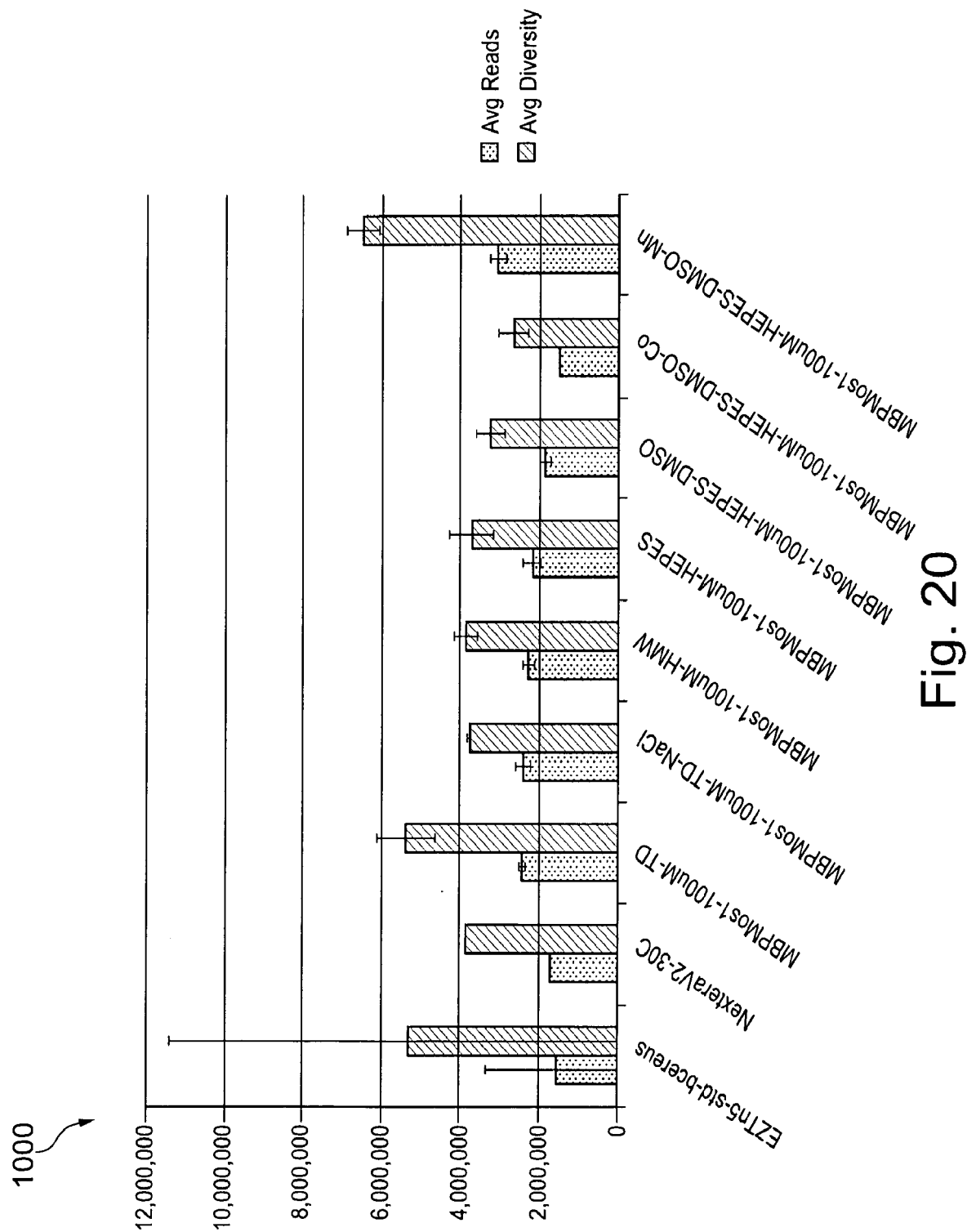


Fig. 18C

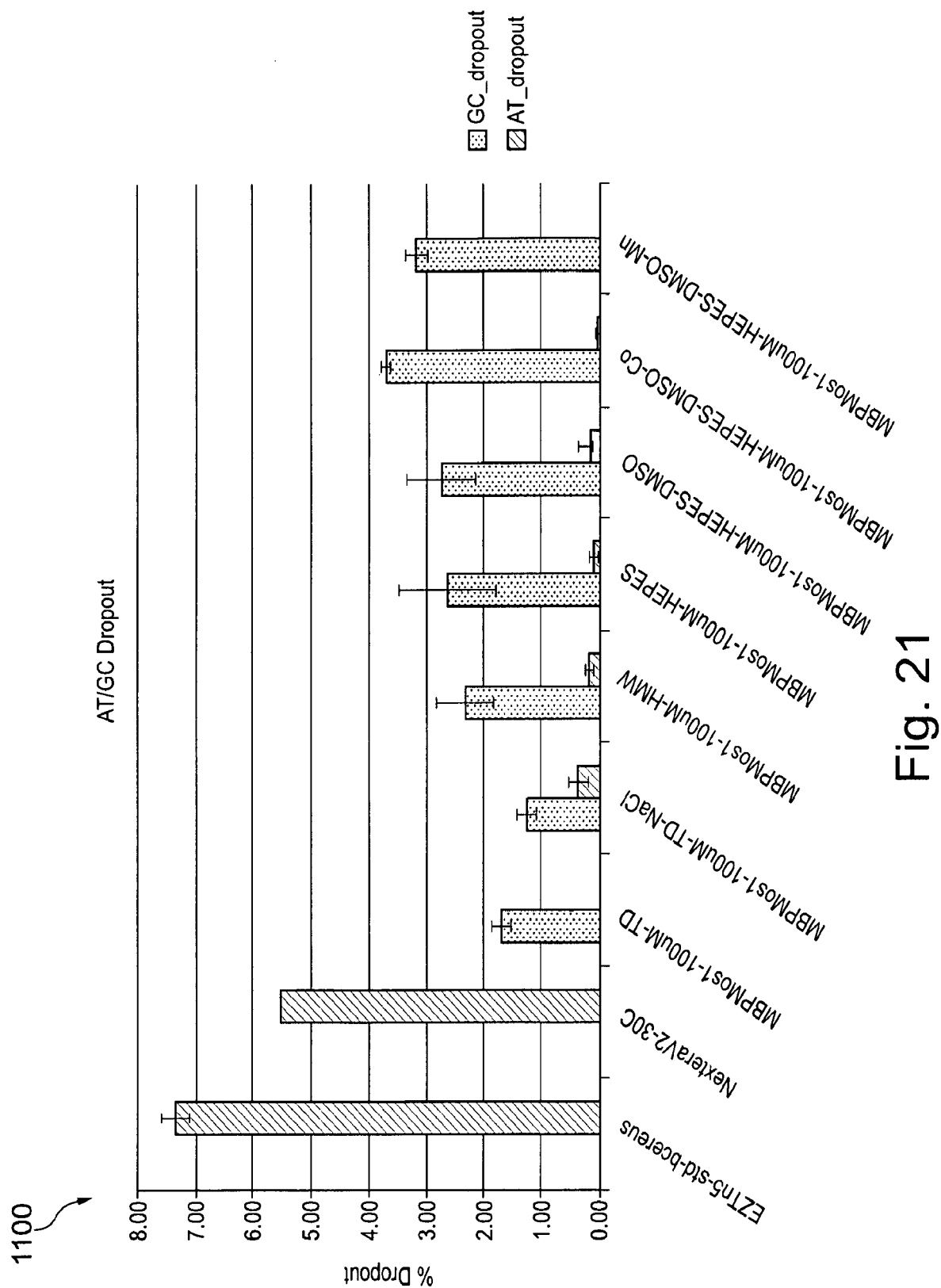
20/34



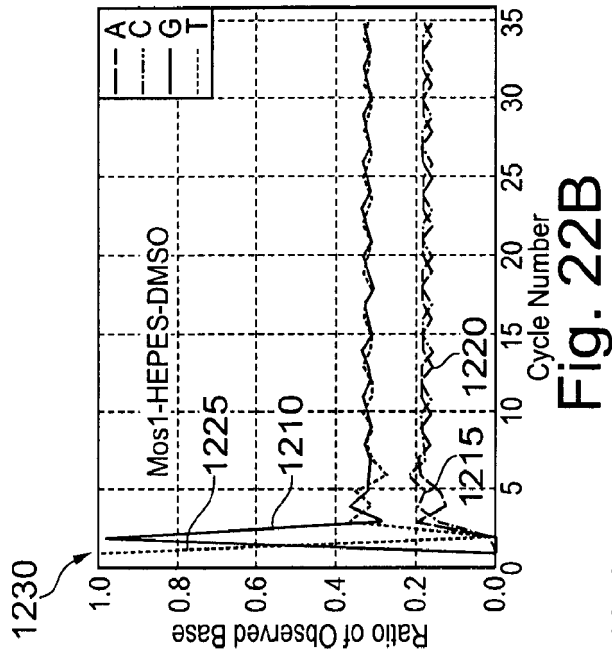
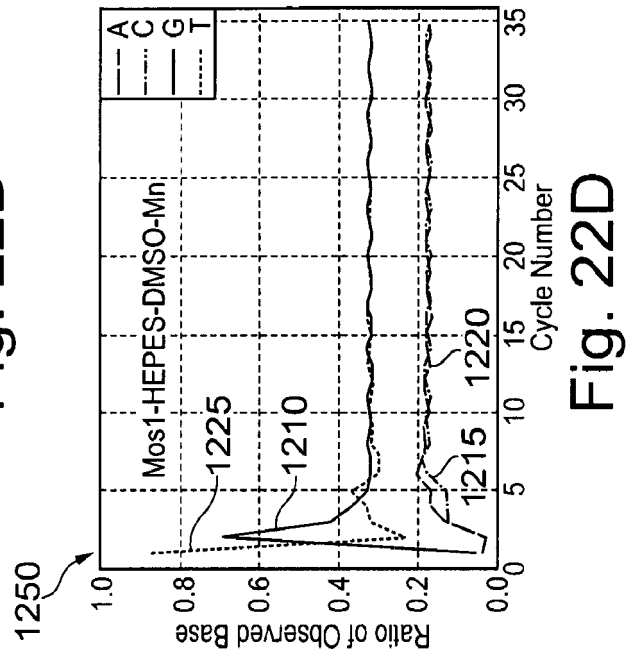
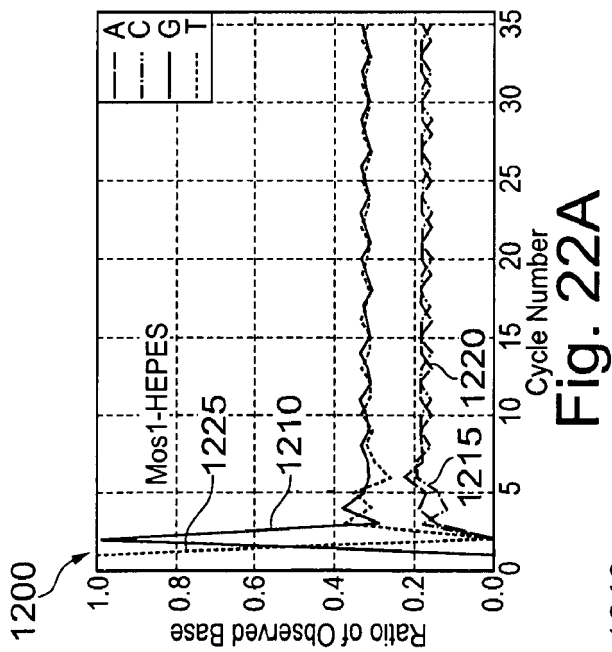
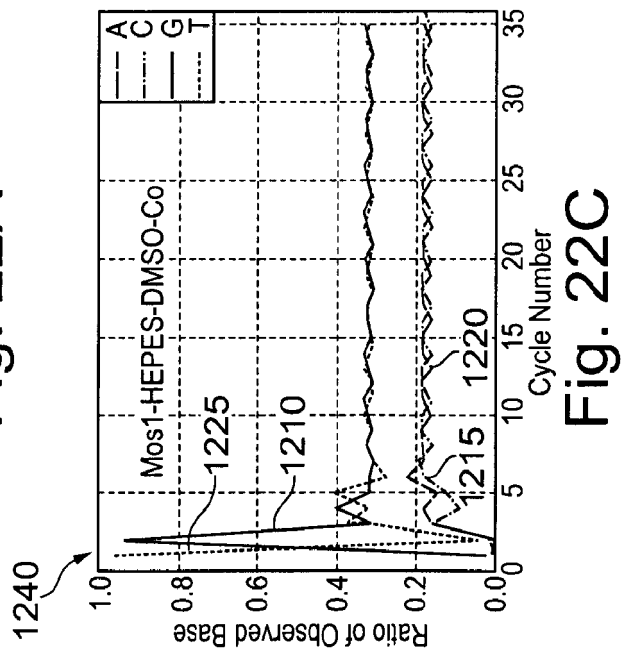
21/34



22/34



23/34



24/34

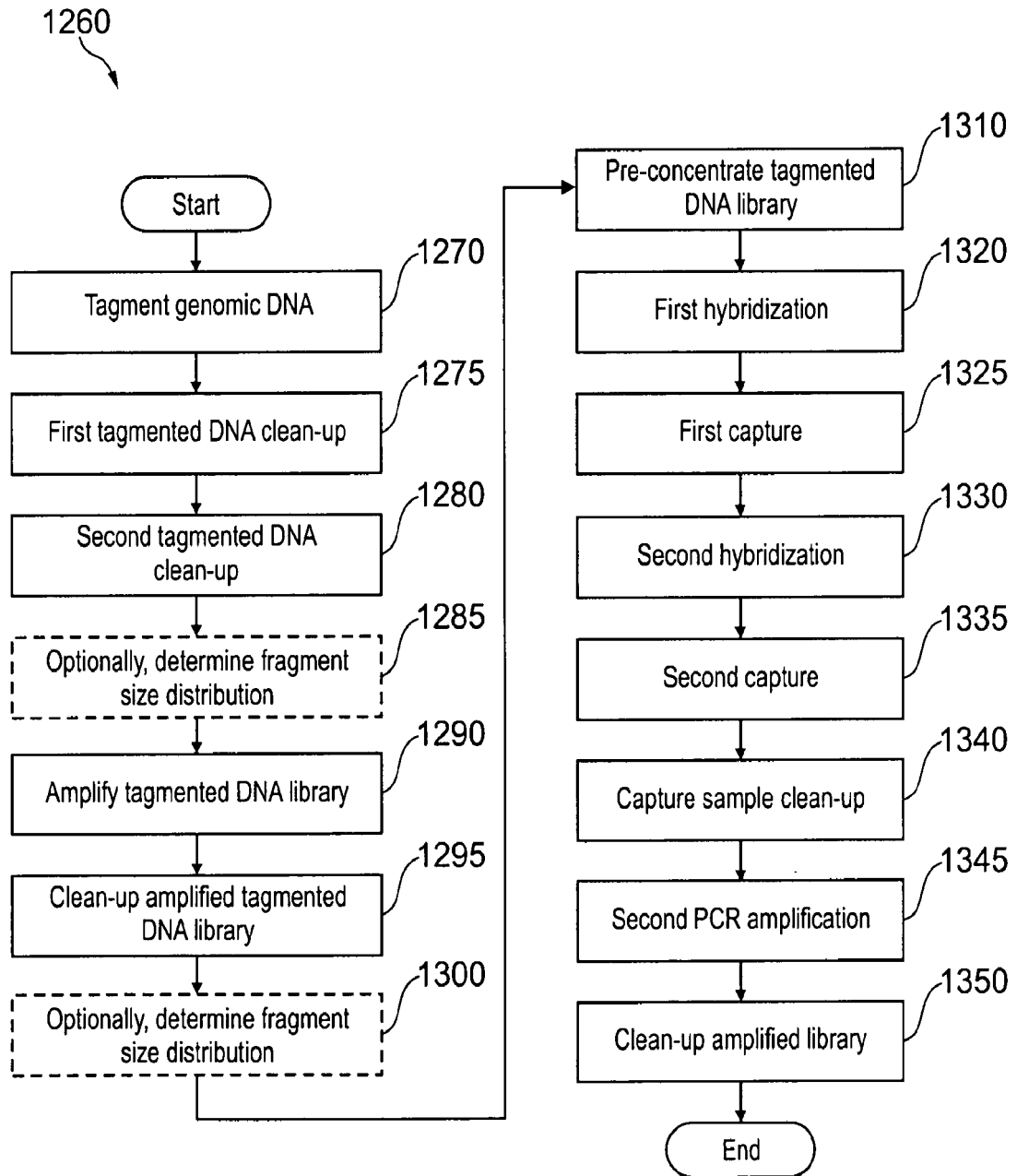


Fig. 23

25/34

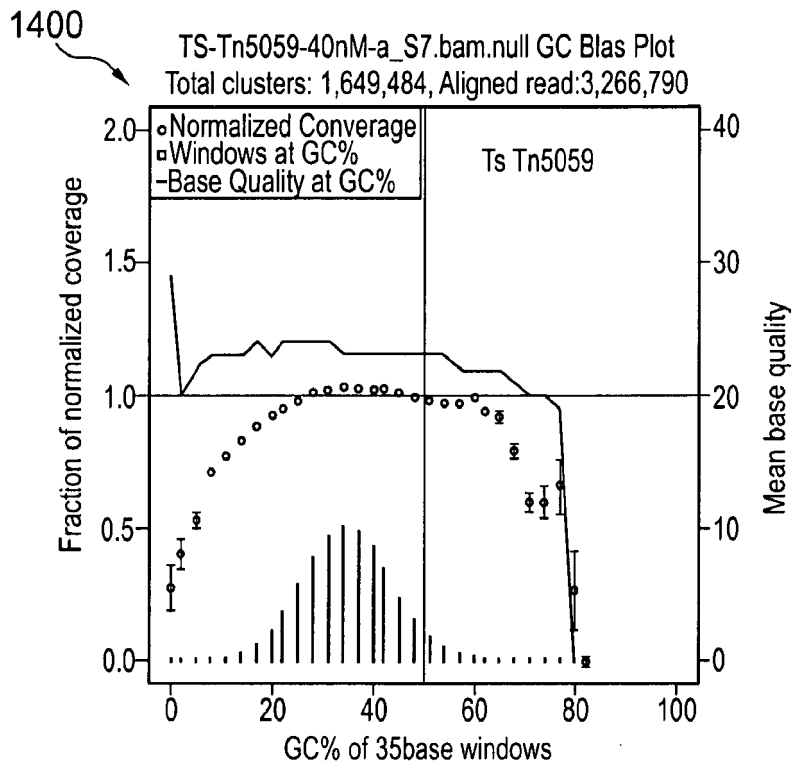


Fig. 24A

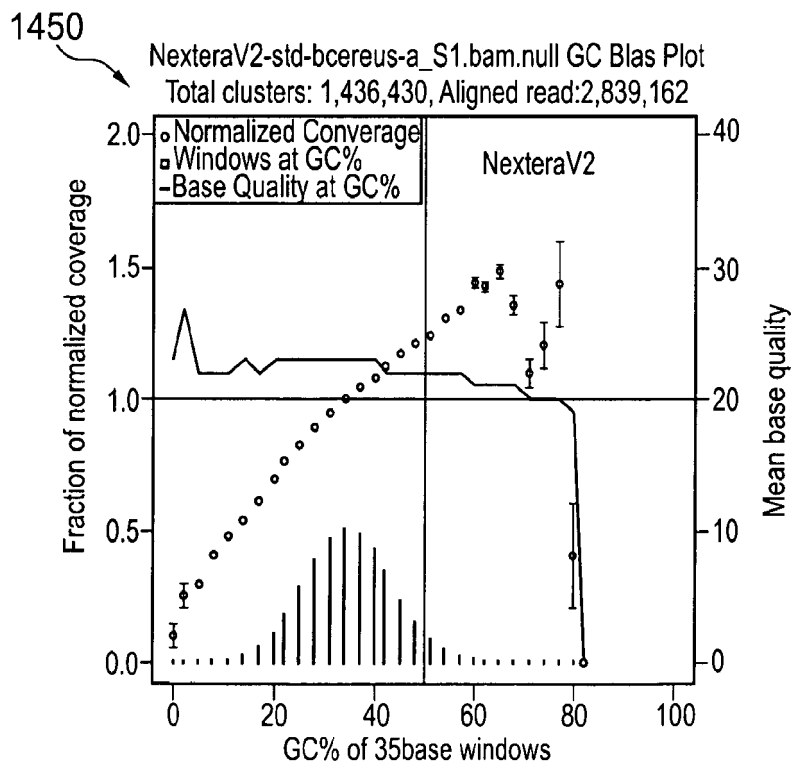


Fig. 24B

26/34

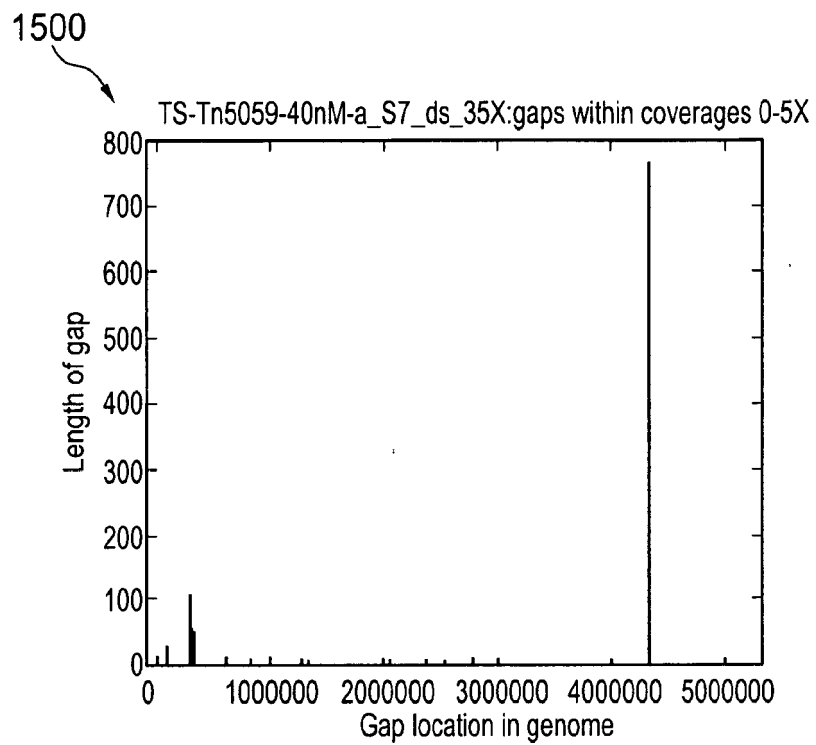


Fig. 25A

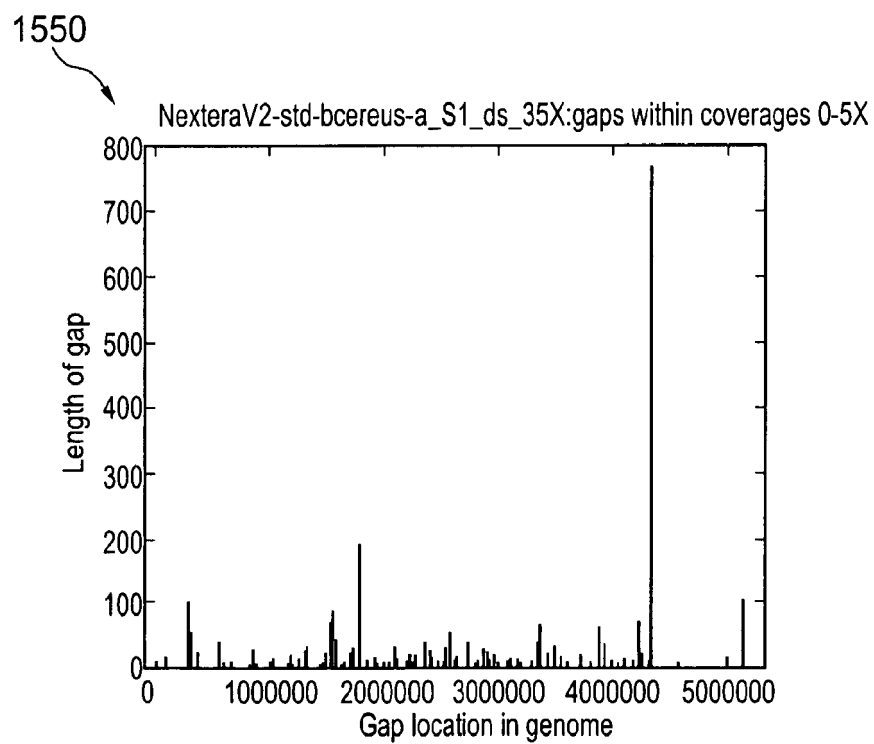


Fig. 25B

27/34

Activity of TDE1 (Tn5 version-1) and TS-Tn5 normalized to
TS-Tn5059 at 40nM to 25ng human gDNA input.

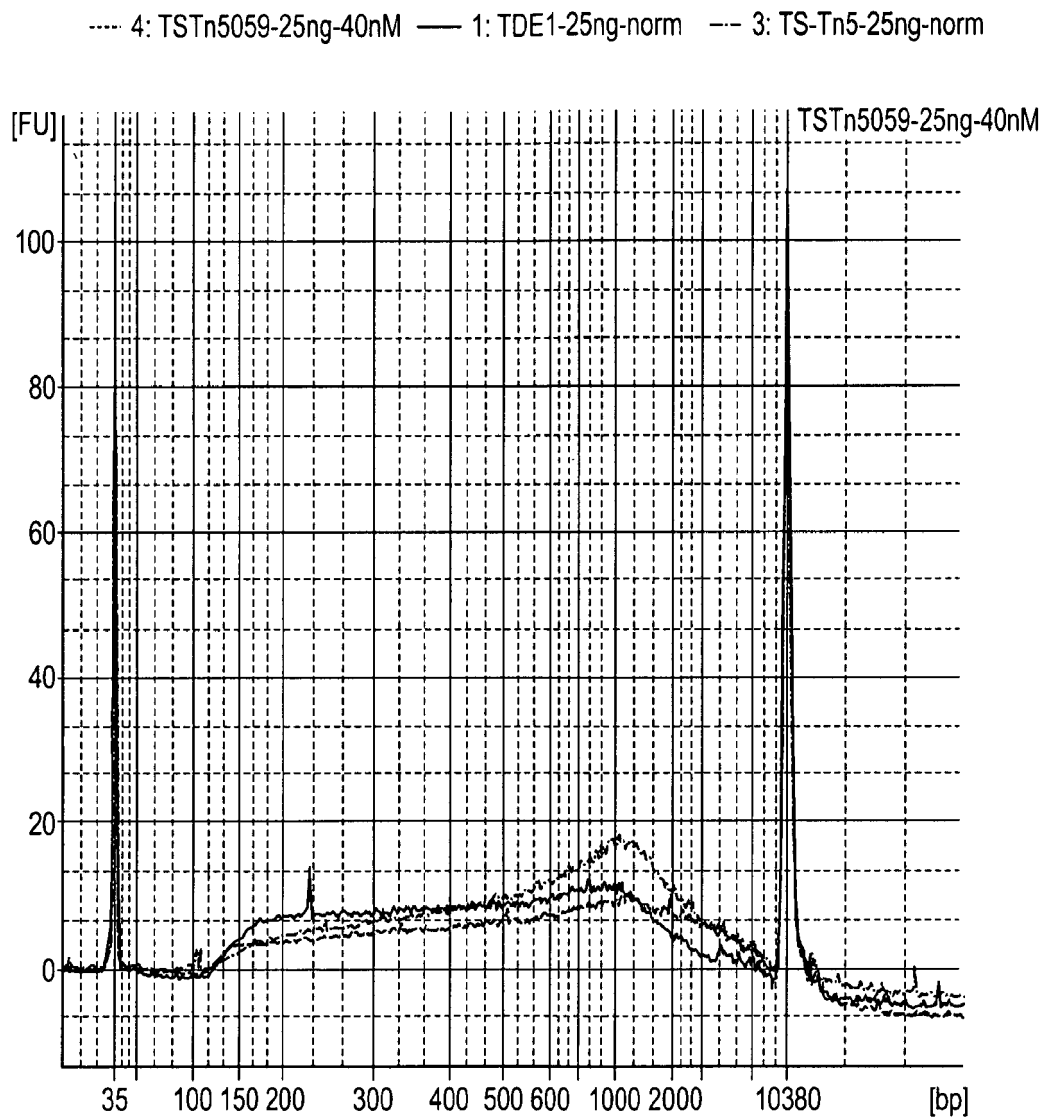


Fig. 26

28/34

Analysis of the size distribution of the fragments

Total Area Under the curve:

100-300bp = 20% - 30%
 301-600bp = 30% - 40%
 601-7,000bp = 30 - 40%
 100-7,000bp $\geq$ 90%

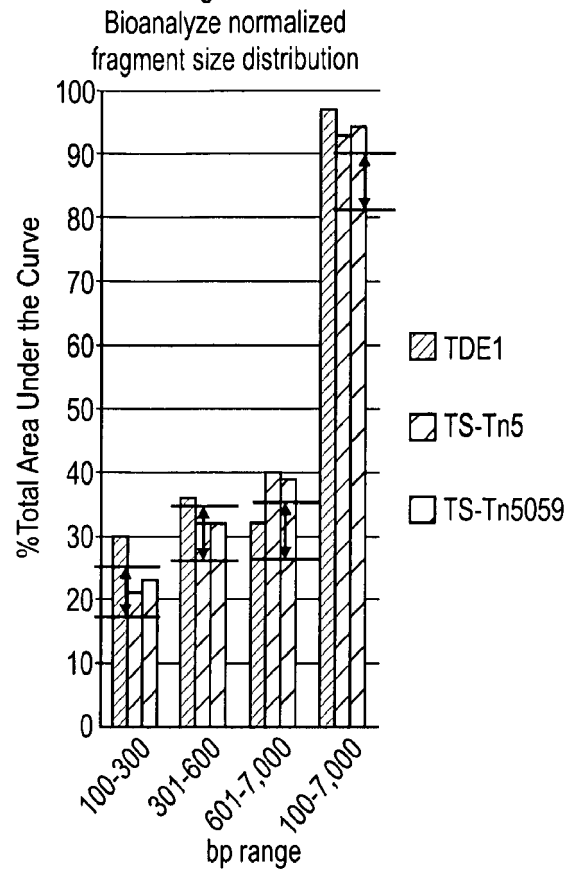
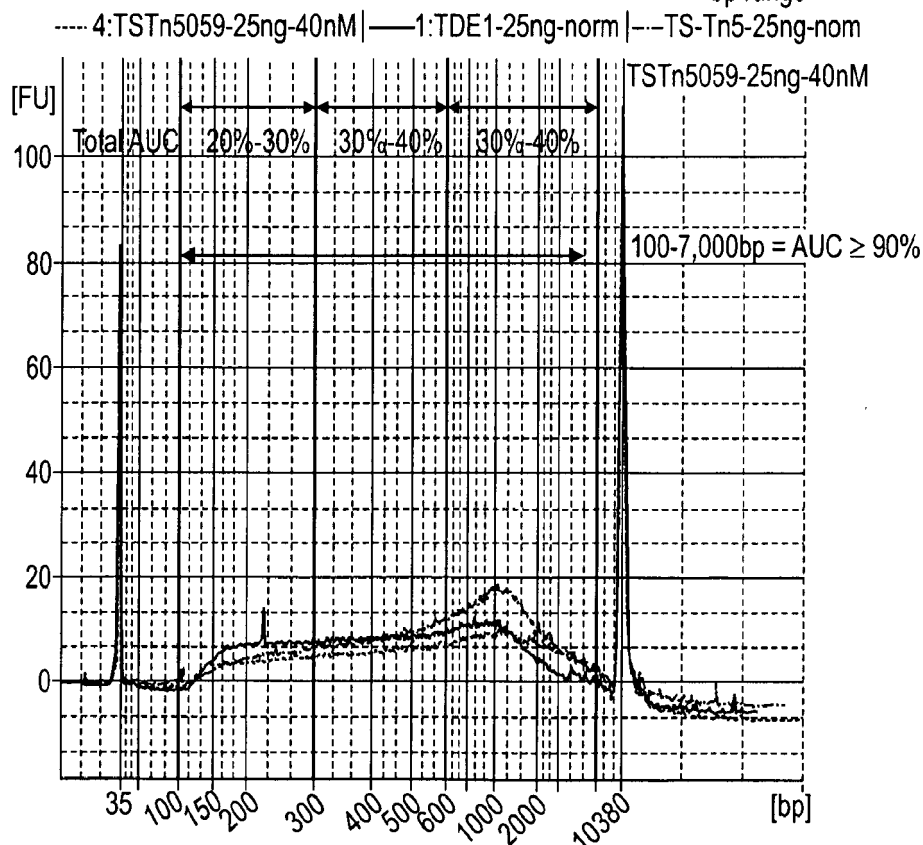


Fig. 27

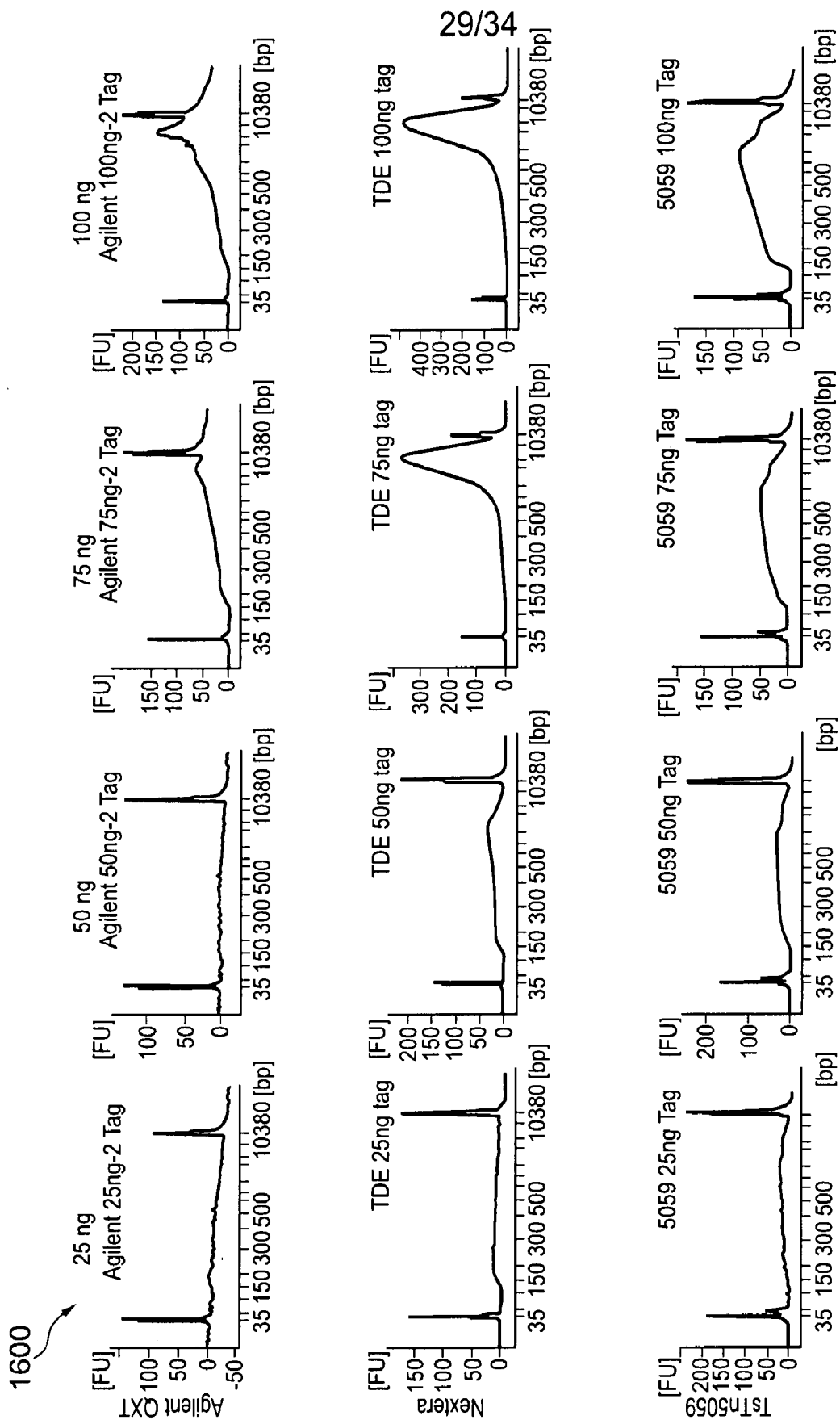


Fig. 28

30/34

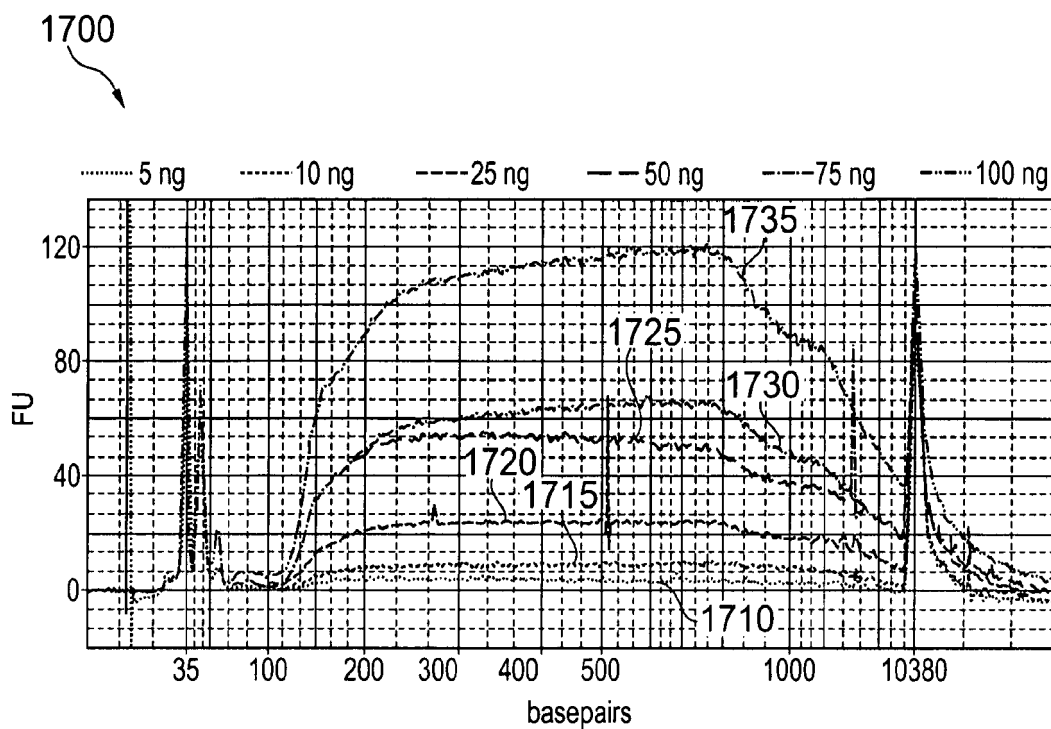


Fig. 29A

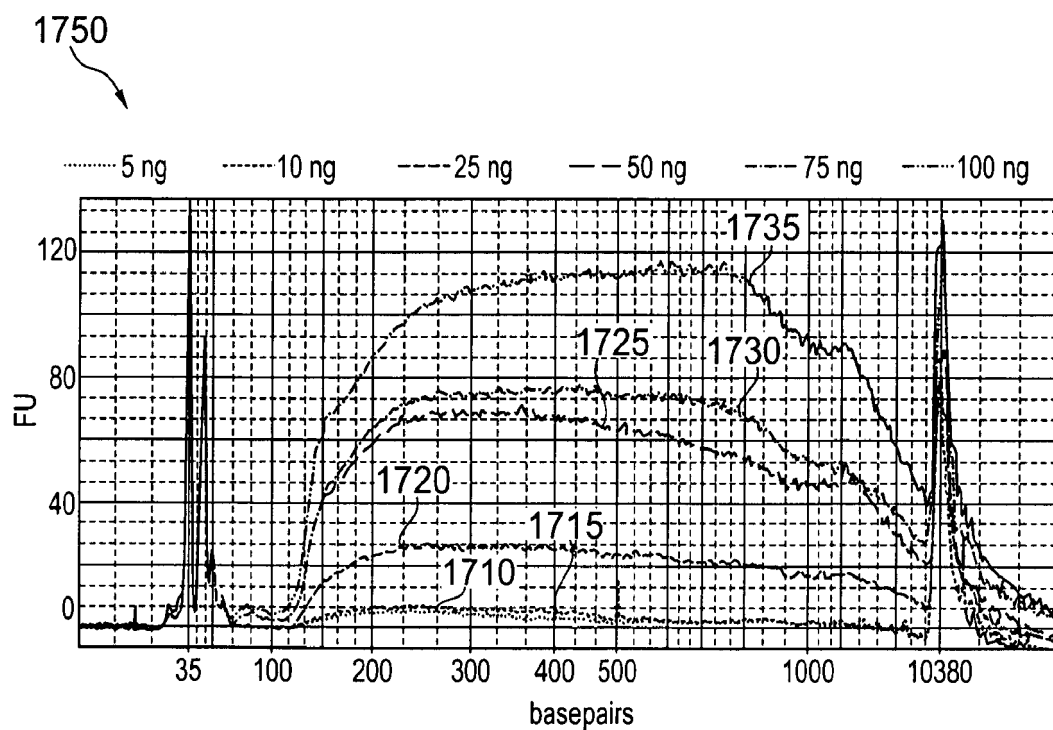


Fig. 29B

31/34

TDE1 at 6x "normalized" concentration using 25ng-100ng gDNA

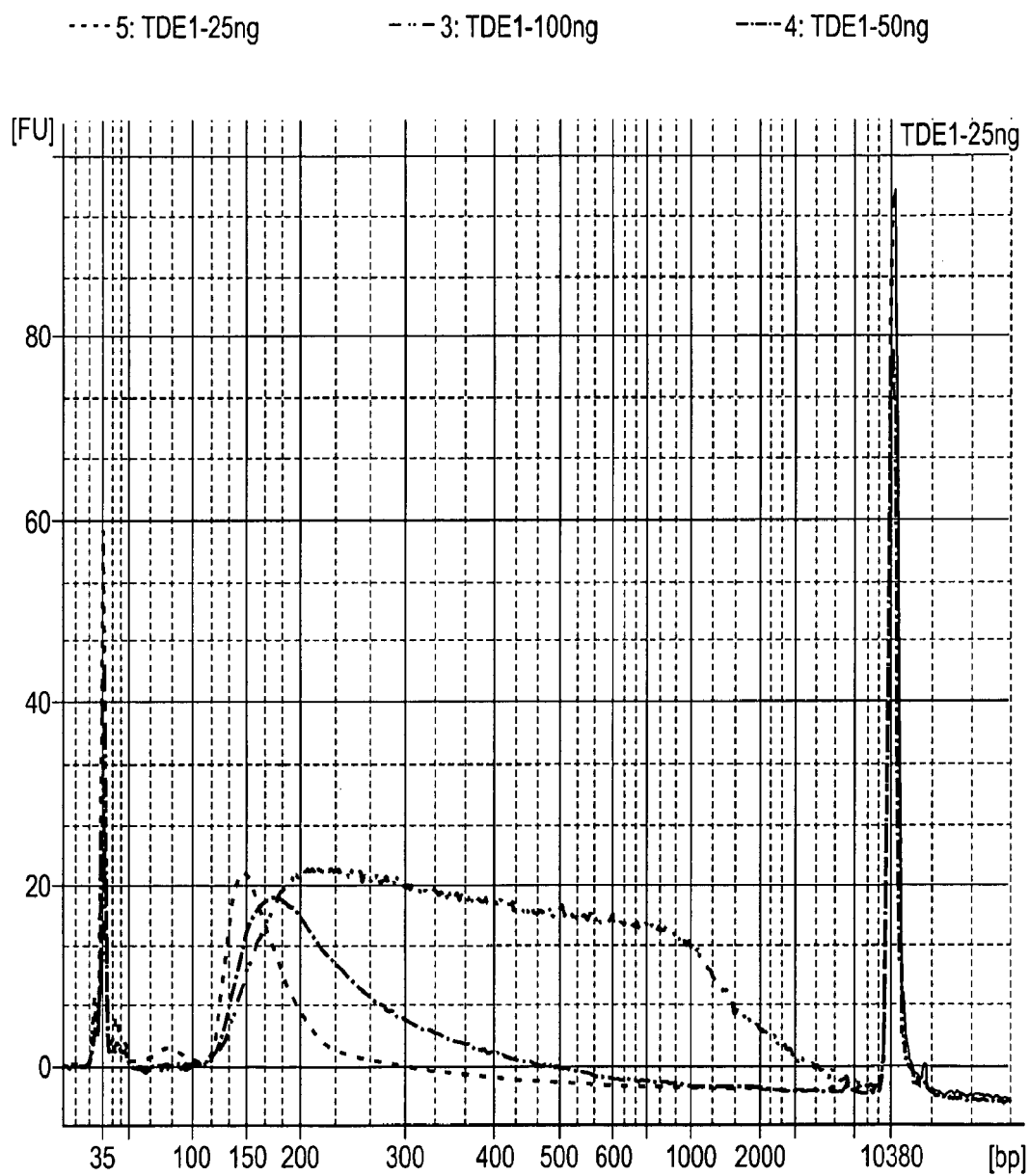


Fig. 30

32/34

TS-Tn5 at 6x "normalized" concentration using 25ng-100ng gDNA

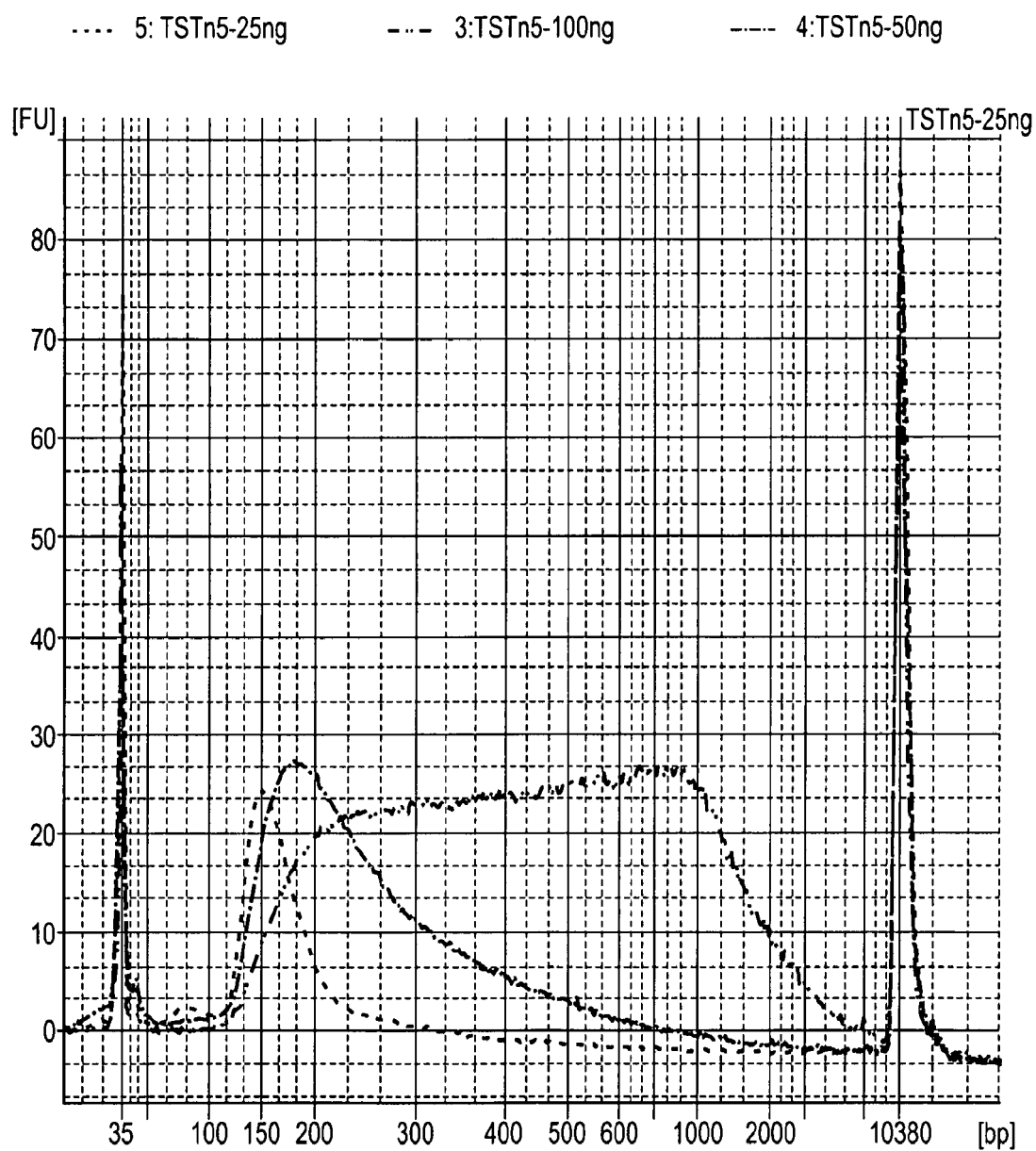


Fig. 31

33/34

TS-Tn5059 at 6x "normalized" concentration using 10ng-100ng of
gDNA

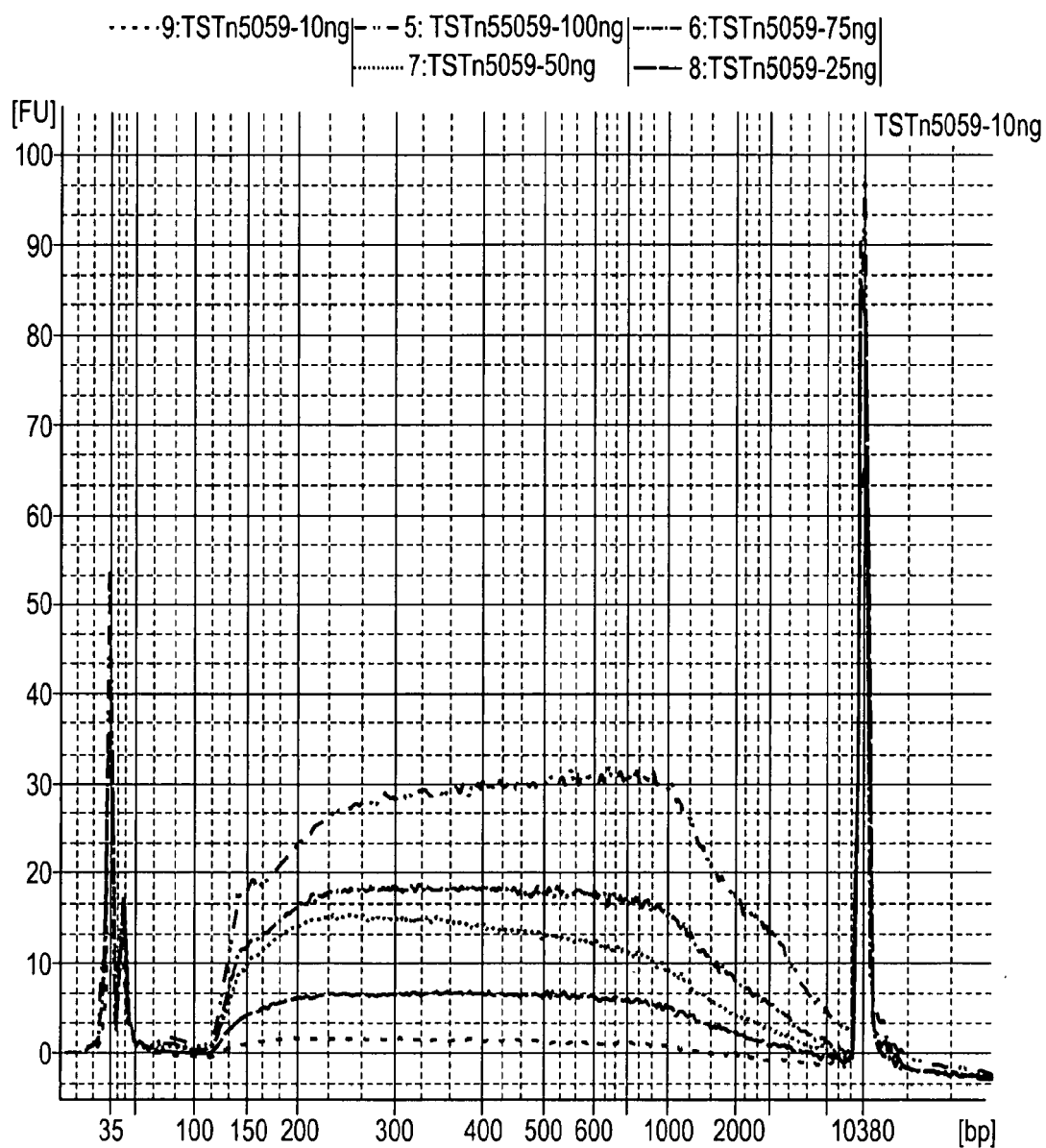


Fig. 32

34/34

TS-Tn5059 at 6x "normalized" concentration using 5-500ng gDNA inputs

----10: TSTn55059-5ng | ---- 2: TSTn55059-400ng | ---- 4: TSTn55059-200ng |
---1: TSTn55059-500ng | 3: TSTn55059-300ng | - - 5: TSTn55059-100ng |

—6: TSTn5059-75ng | —8: TSTn5059-25ng |
-----7: TSTn5059-50ng | -----9: TSTn5059-10ng |

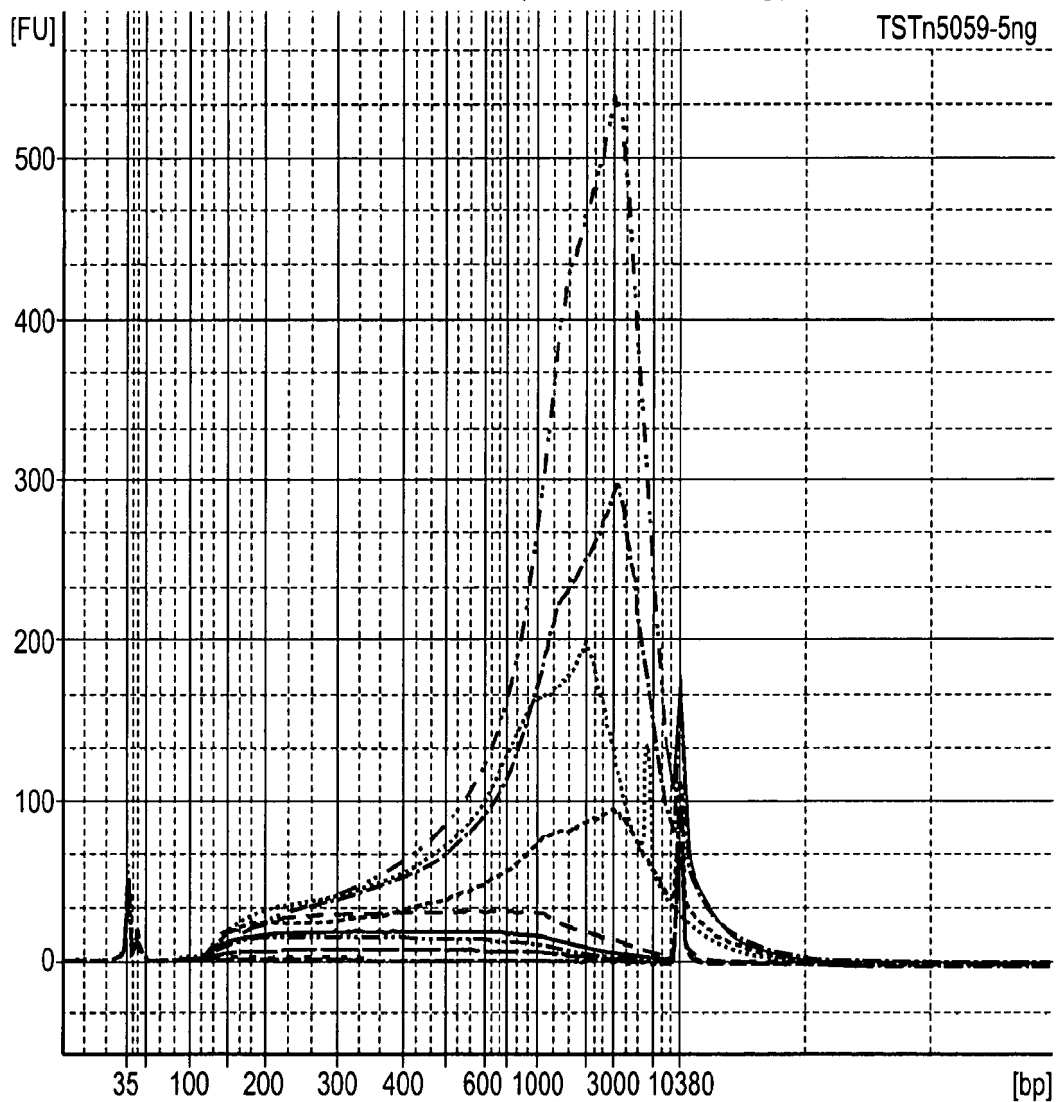


Fig. 33