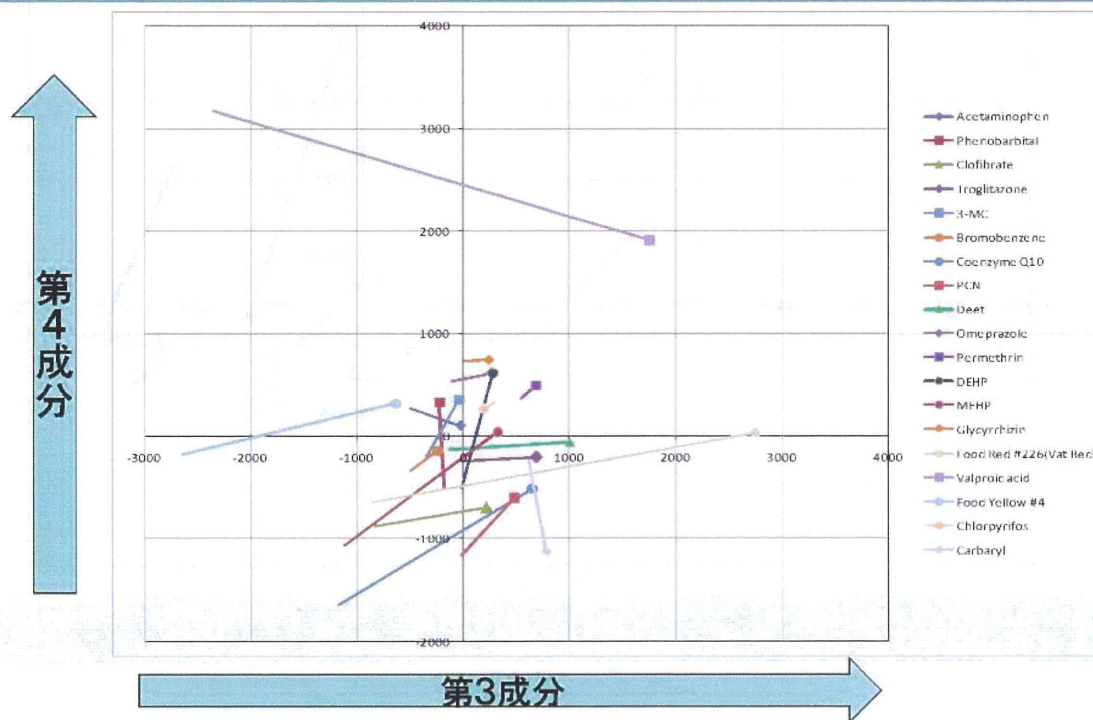


1.6.主成分分析による座標変換

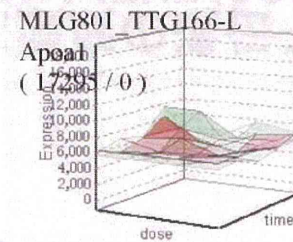
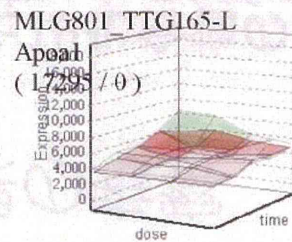
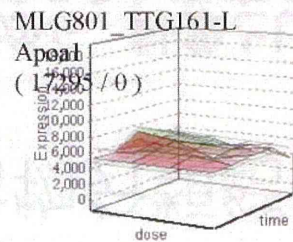
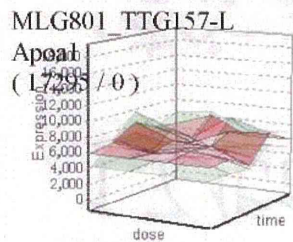
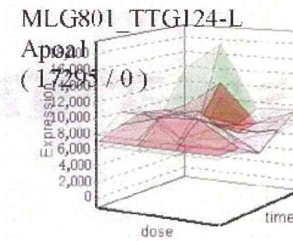
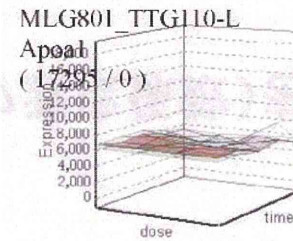
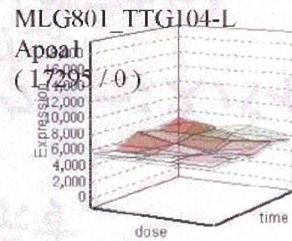
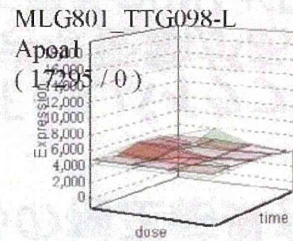
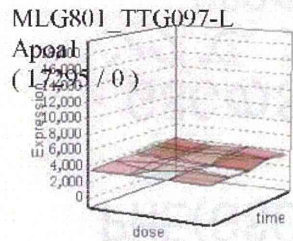
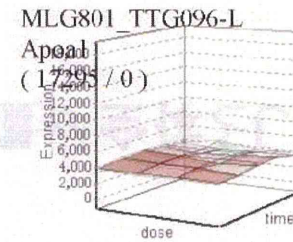
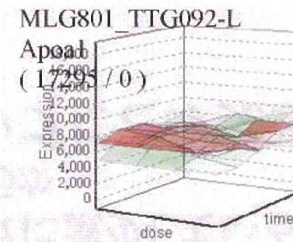
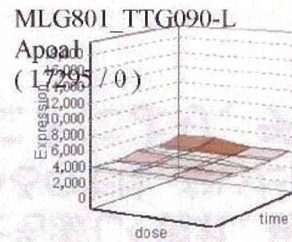
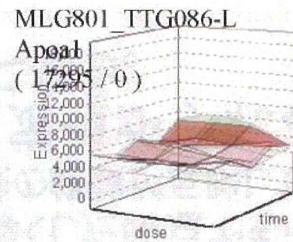
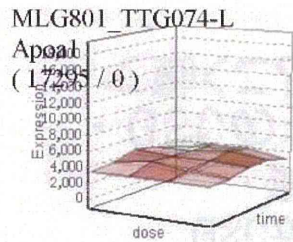
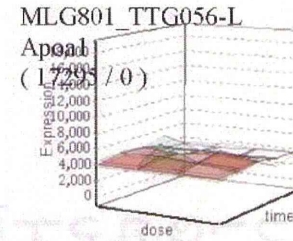
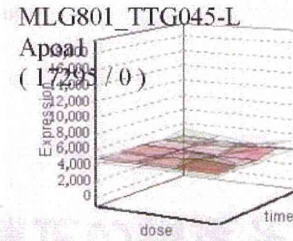
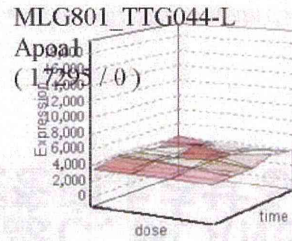
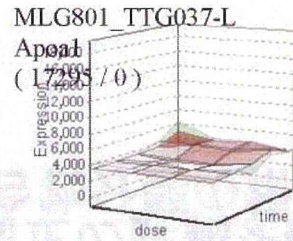
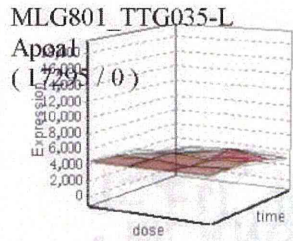
19化合物の溶媒と最大Doseに対する主成分分析結果 第3, 4成分



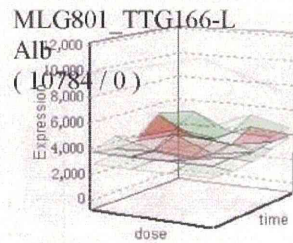
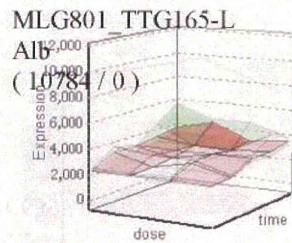
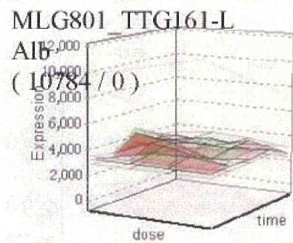
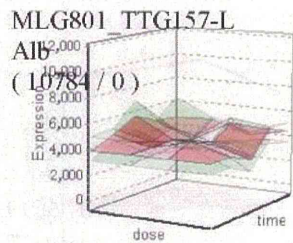
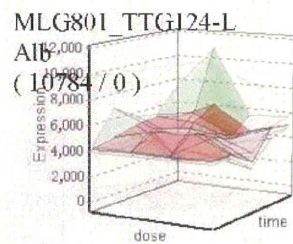
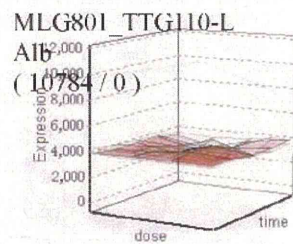
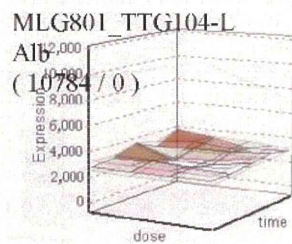
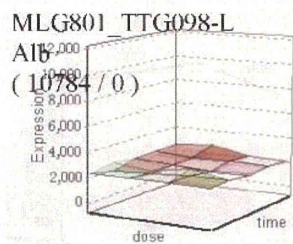
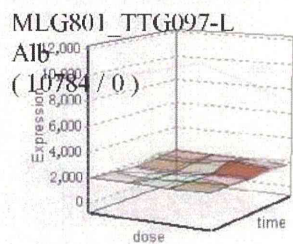
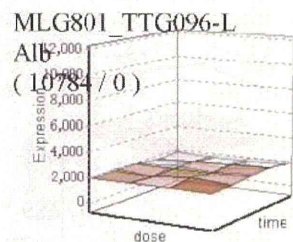
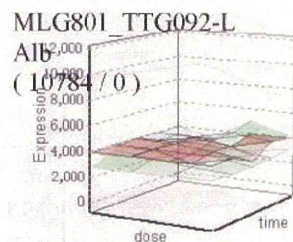
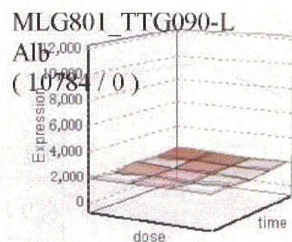
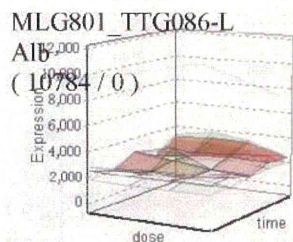
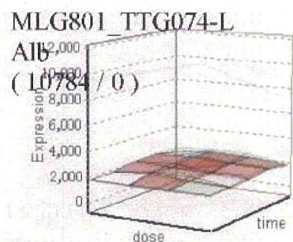
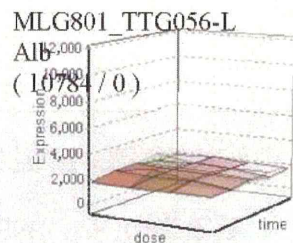
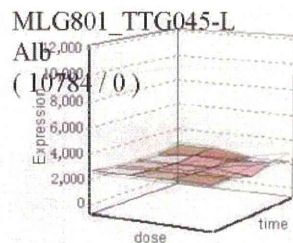
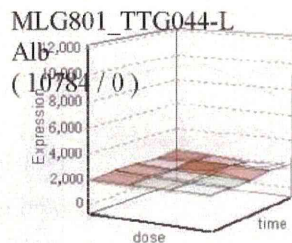
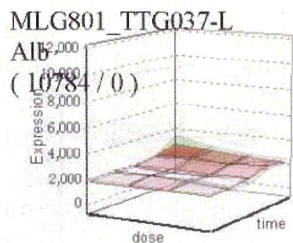
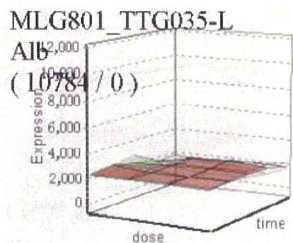
第3成分として、赤色226号、バルプロ酸の影響が現れていると考えられる

1.7.化合物分類結果の考察

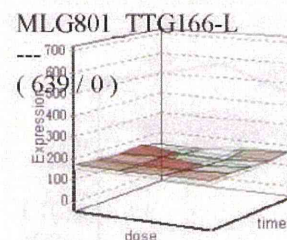
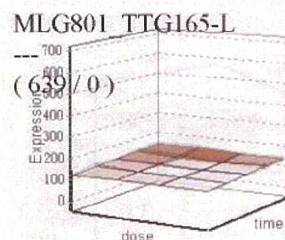
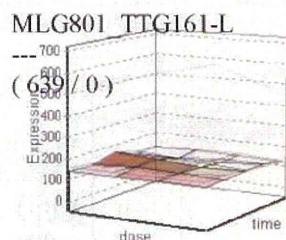
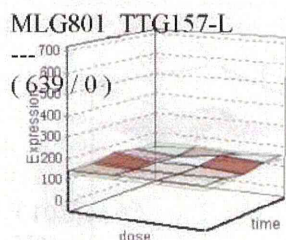
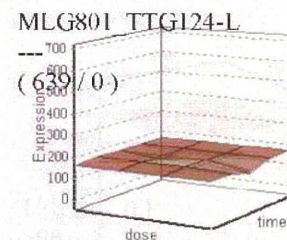
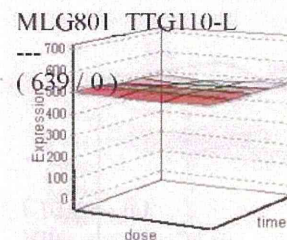
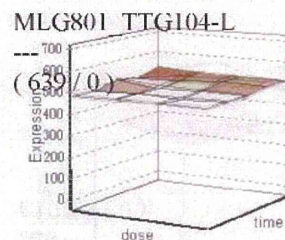
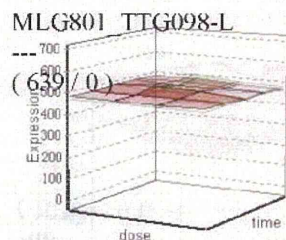
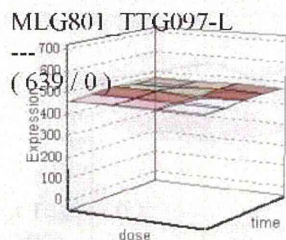
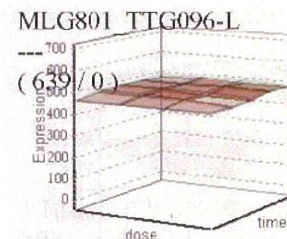
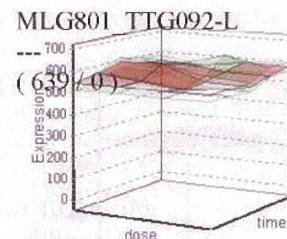
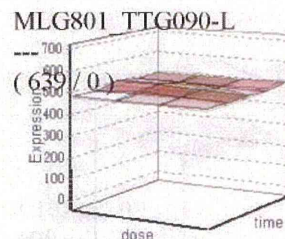
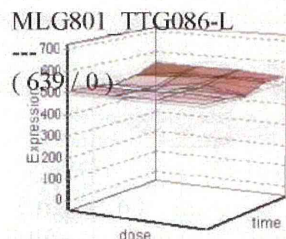
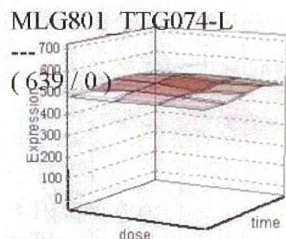
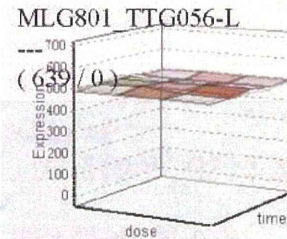
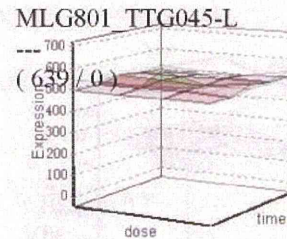
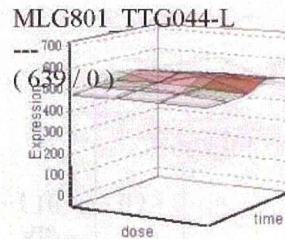
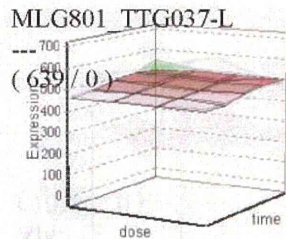
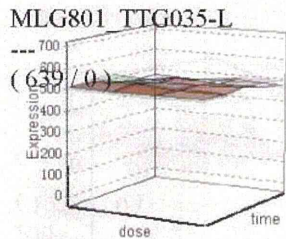
- ・ 次ページから、対象とした19化合物の高濃度の遺伝子(Apoa1、Alb)、及び、GSCのうち濃度の高い方の3種のRNA(THR(GSC)、LYS(GSC)、PHE(GSC))の補正結果を示す。
- ・ GSCのSpF(スパイクファクター:スパイク濃度係数)を変更したタイミングで、大きな変動があった。
 - GSCの低用量のRNAが「0」と推定された
 - GSCが薄くした時点でもっとも激しく現れ、徐々に減少している
 - ・ 実験の経験が反映しているのでは、ないだろうか
- ・ GSCの推定値がずれることにより、チップごとの発現量が全体として動くことになる。
- ・ MLANG補正の詳細を確認し、MLANG補正の精度を向上させることにより、化合物分類の精度を向上させる。



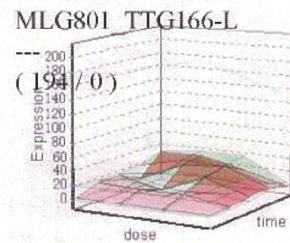
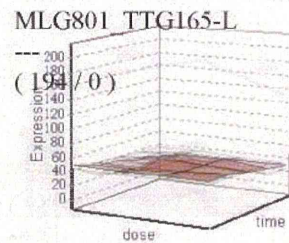
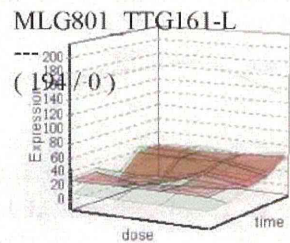
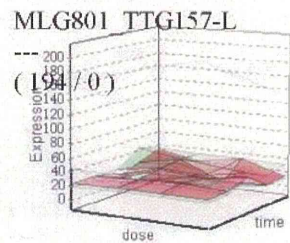
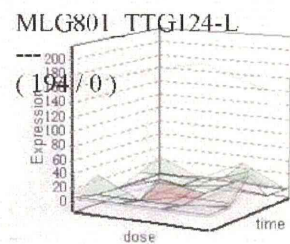
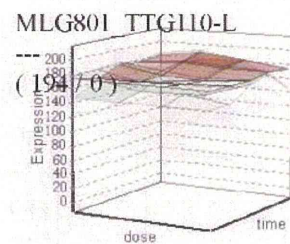
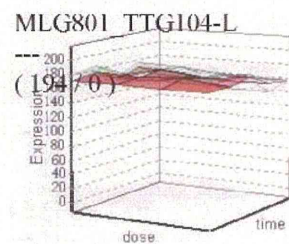
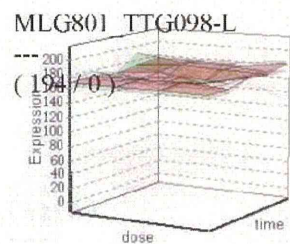
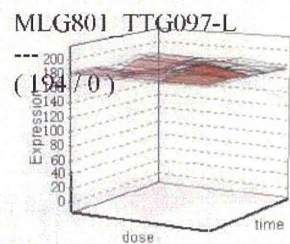
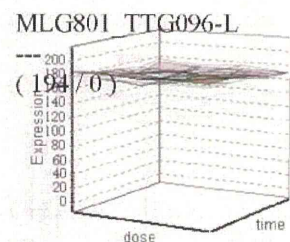
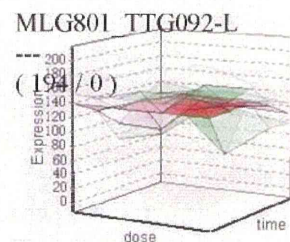
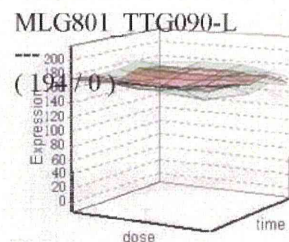
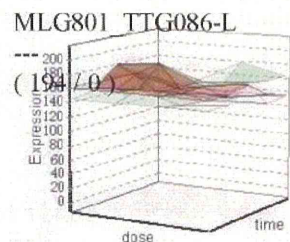
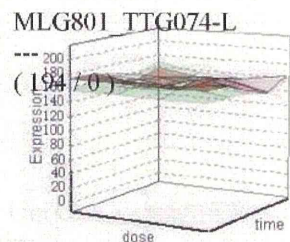
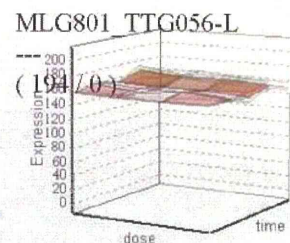
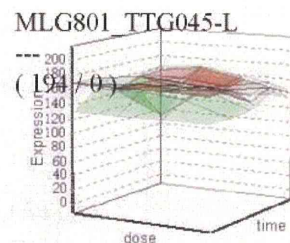
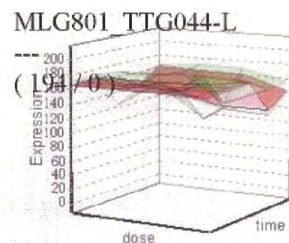
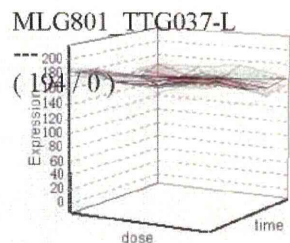
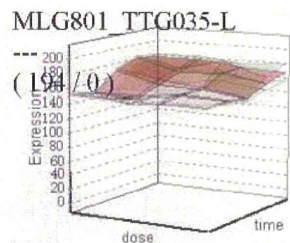
高発現遺伝子の例
TTG124から、GSCを薄めている。



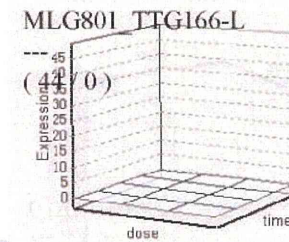
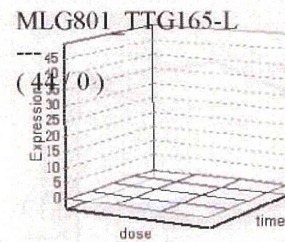
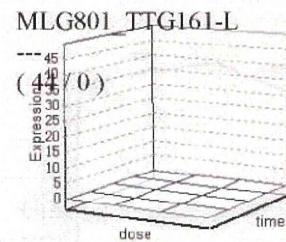
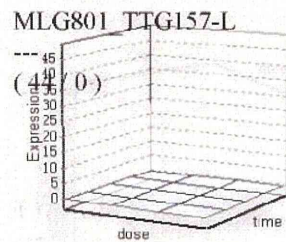
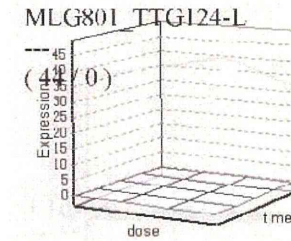
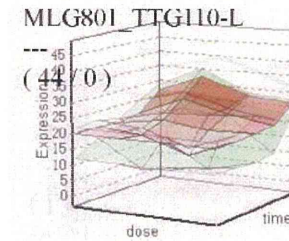
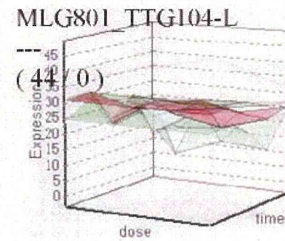
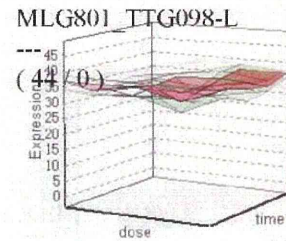
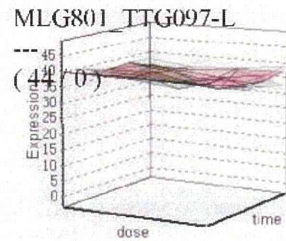
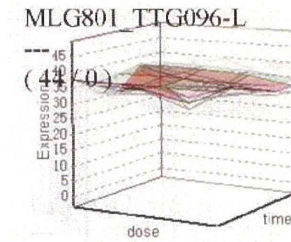
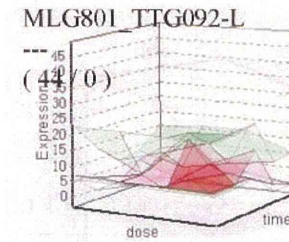
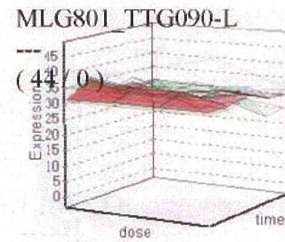
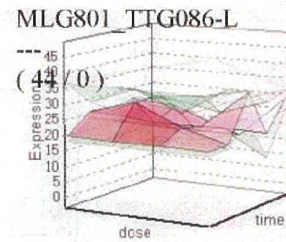
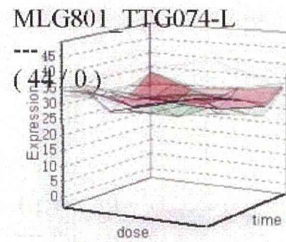
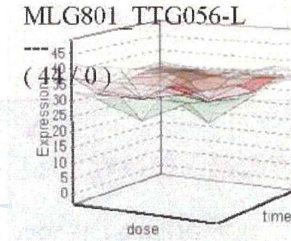
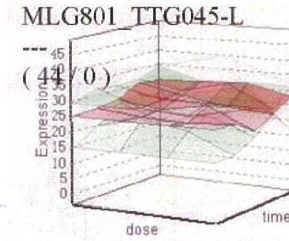
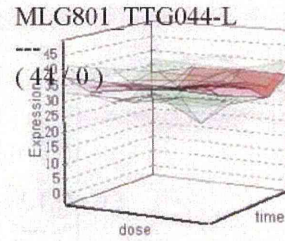
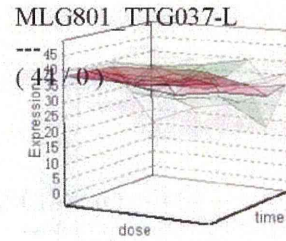
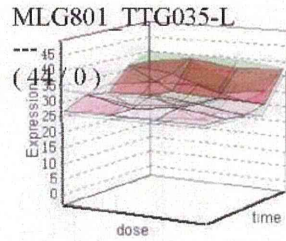
高発現遺伝子の例
TTG124から、GSCを薄めている。



GSC(THR)の推定値
TTG92で変動が大きい



GSC(LYS)の推定値
TTG124以降で変動が
大きい



GSC(LYS)の推定値
TTG124以降で0と推定
されている

2.MLANG SpFの精度へ影響

- 化合物分類の実施により、MLANG補正において、SpFの濃度が影響を与えていることが判明した。
- 影響の原因を特定し、精度の向上を図る。

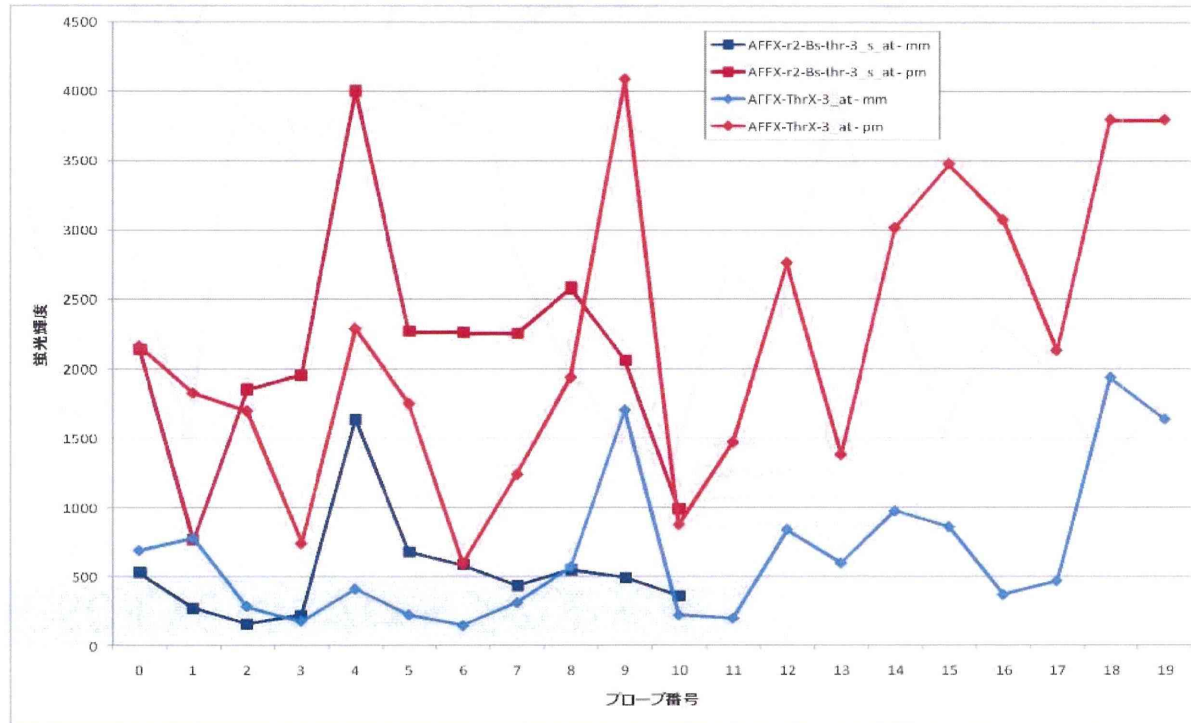
2.1.SpFの精度への影響の調査

- ・ **完全ブランクとGSCのみを計測したチップの間の差異を調査する。**
 - 大きな差異を発生しているプローブは、GSCの影響、又はデブリ/泡などと考えられる。
 - 大きな差異を発生しているプローブを特定し、次のいずれに該当するか確認する。
 - ・ 適切な補正処理が行われている可能性(従来からMLANG上の係数として存在する)
 - ・ デブリの可能性(同一座標近くの値分布を確認する)
 - ・ 泡の可能性(同一座標近辺の値分布を確認する)
 - ・ もっと短い部分一致の可能性

- ・ **もっと短い部分一致の情報の追加で多くのプローブを救える場合には、係数を作成する一致長さの閾値を短くすることを検討する**

2.2.GSCのみを計測したチップの蛍光値

GSC-THR 3'プローブの蛍光値



全体的にばらつきがあるが、PMがMMを上回っており、想定範囲の結果である