

# Report 1D: Expression level, subcellular localization and tissue-specificity of lincRNAs and pcgenes categorized by overlaps with promoters and enhancers.

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## Introduction

Here, lincRNAs and protein-coding genes were split into categories for each combination of overlap/absence of overlap with promoters and enhancers.

## Data

### lincRNAs

promoter	enhancer	number of genes
yes	yes	38
yes	no	480
no	yes	236
no	no	1756
both	yes	274
both	no	2236

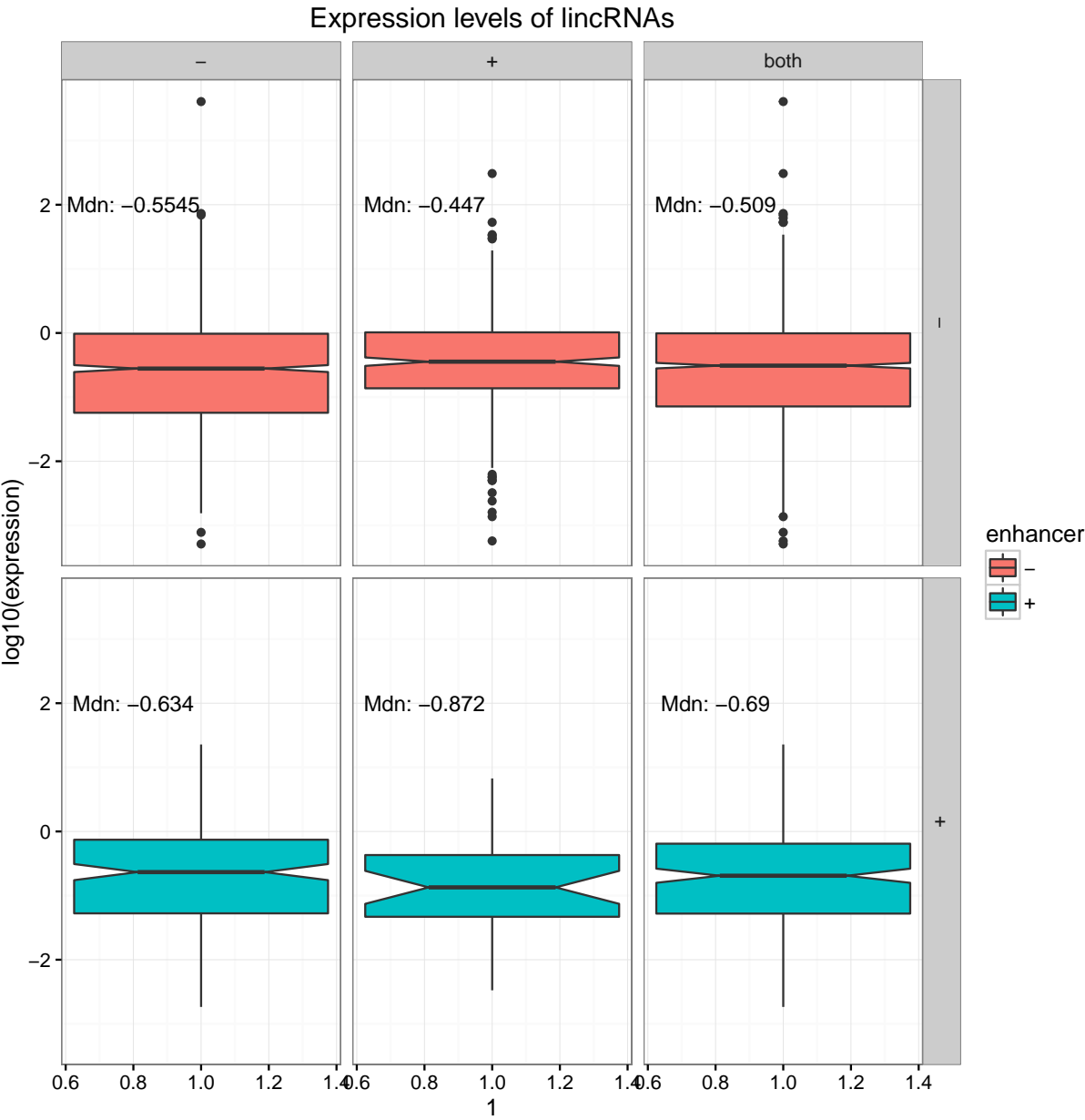
### protein-coding genes

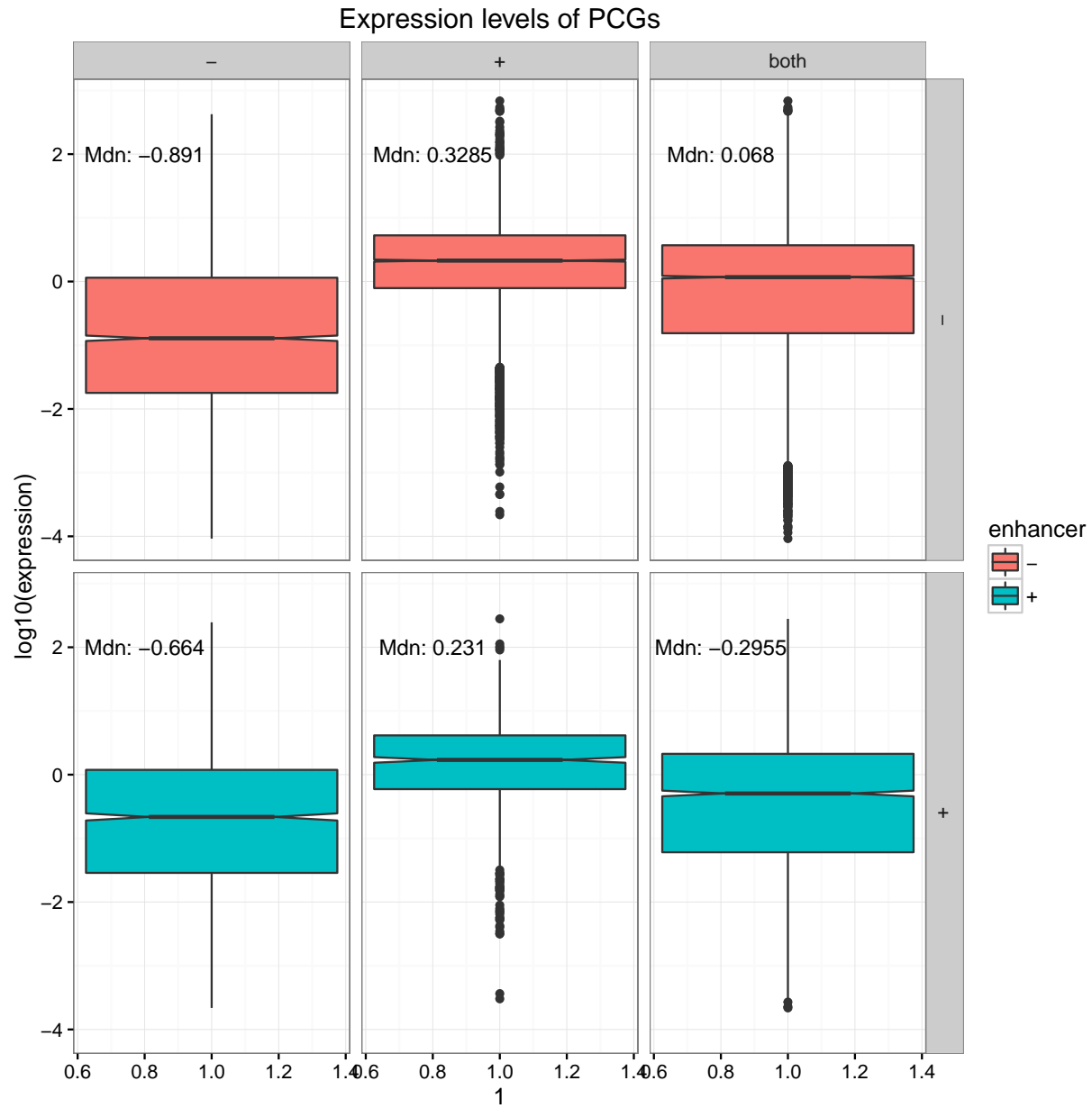
promoter	enhancer	number of genes
yes	yes	914
yes	no	7074
no	yes	2105
no	no	4753
both	yes	3019
both	no	11827

## Results

All p-values displayed on plots were obtained by performing Mann-Whitney tests.

Expression levels

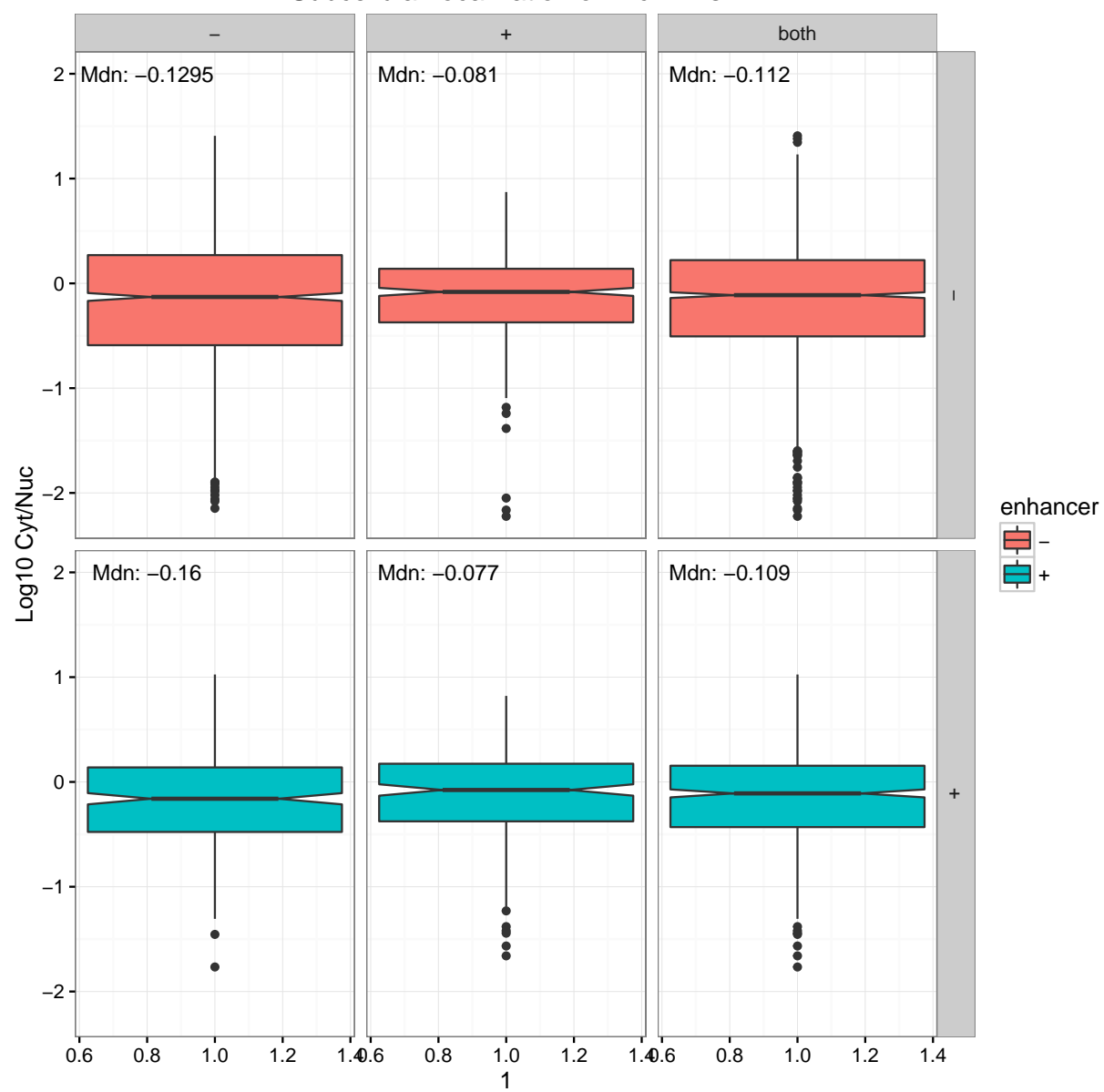


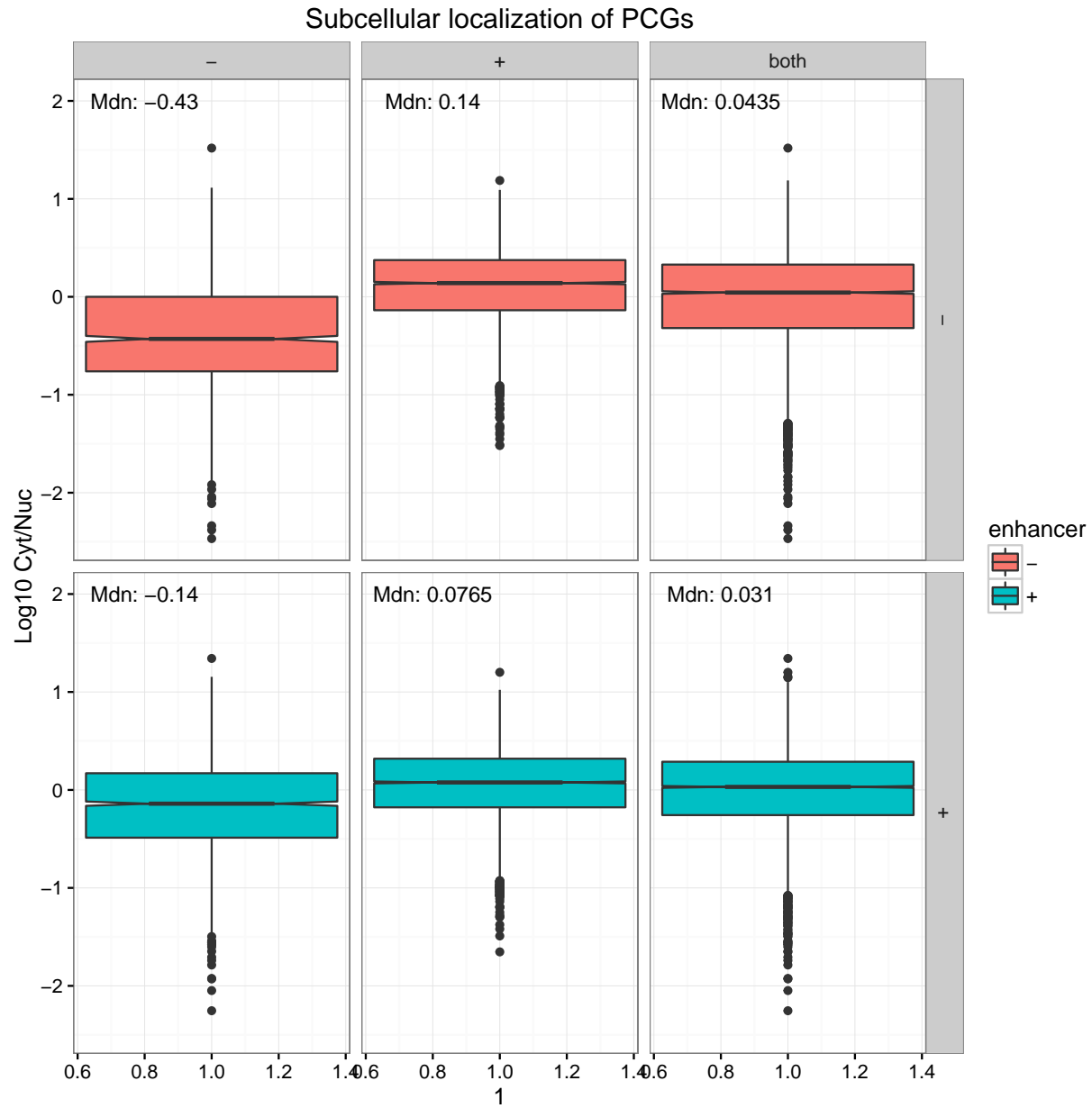


## Subcellular localization

The ratios depicted below represent the abundance of RNA in the cytoplasm relative to the nucleus. There is no significant difference between the localization of TAD-bound and non-TAD-bound lincRNAs, while the TAD-bound protein-coding genes are more abundant in the cytoplasm than in the nucleus.

# Subcellular localization of lincRNAs



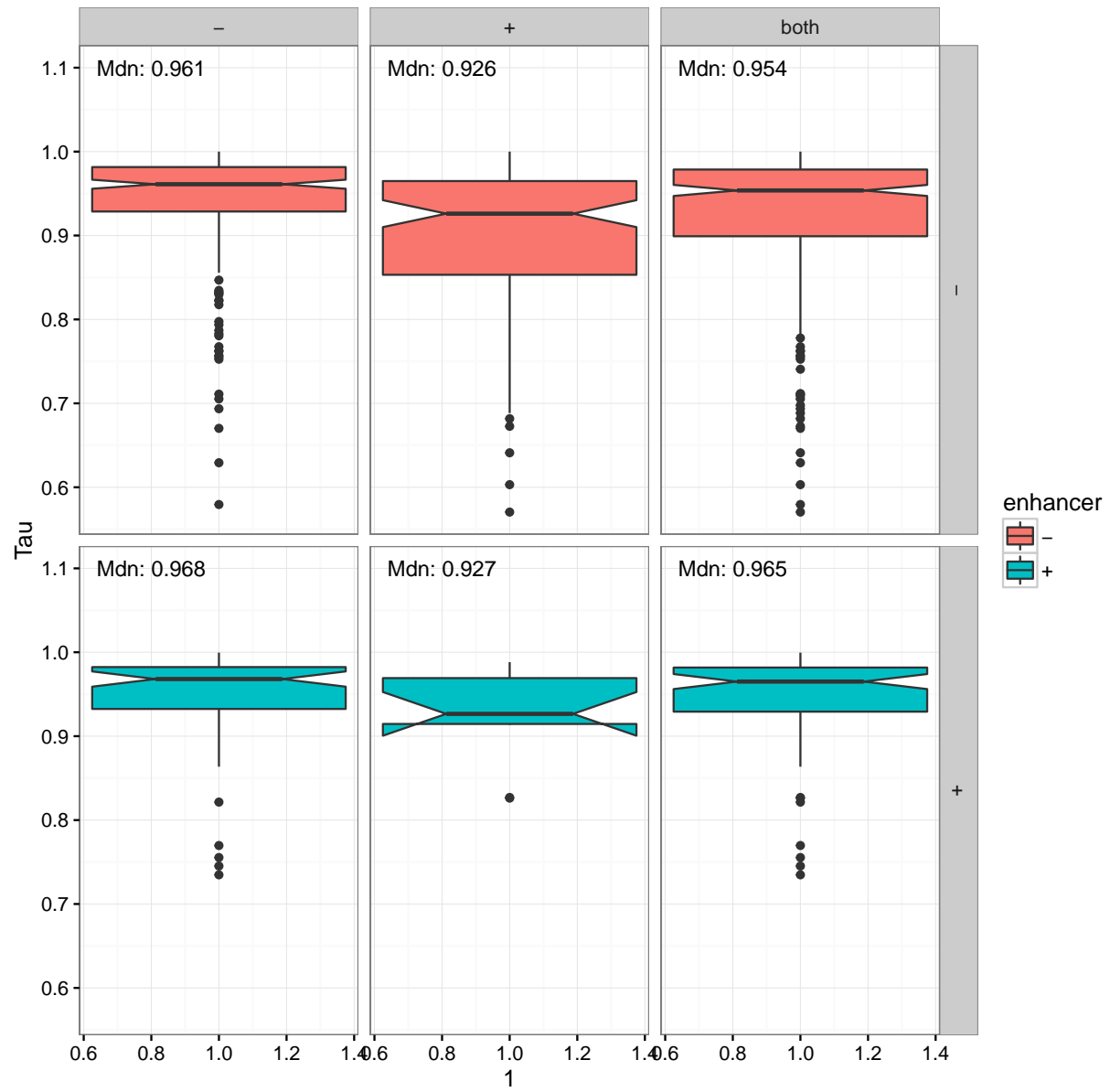


## Tissue specificity

$\tau$  was calculated from a set of tissue-wise expression level for all transcripts. Again, there seem to be no difference in tissue specificity between TAD-bound and nonTAD-bound lincRNAs or protein coding genes. Overall the lincRNAs are more tissue specific than protein coding genes.

## notch went outside hinges. Try setting notch=FALSE.

Tissue specificity of lincRNAs



# Tissue specificity of PCGs

