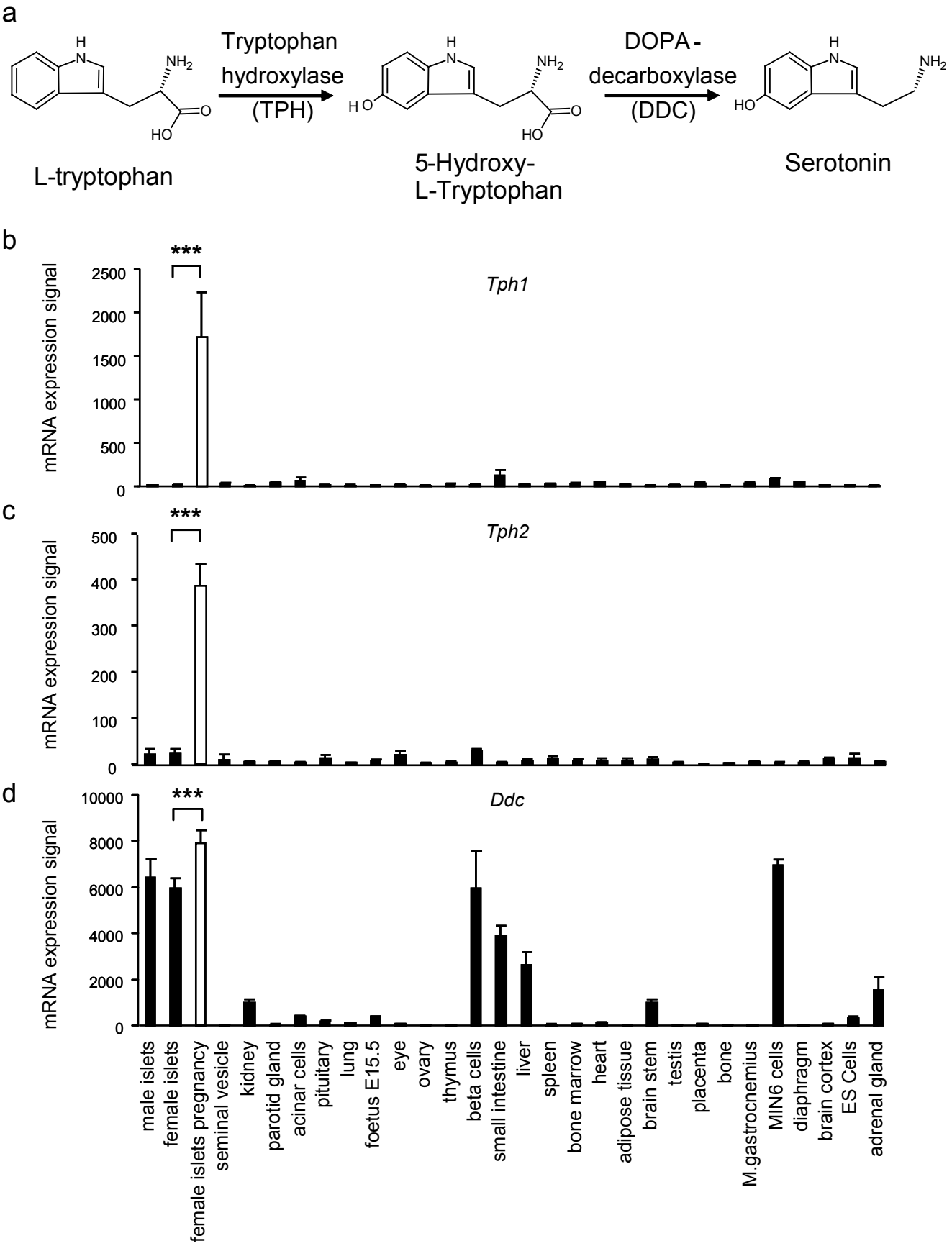
a
Tryptophan hydroxylase (TPH)
DOPA-decarboxylase (DDC)
L-tryptophan
5-Hydroxy-L-Tryptophan
Serotonin
b
Tph1
mRNA expression signal
***
c
Tph2
d
Ddc
male islets
female islets
female islets pregnancy
seminal vesicle
kidney
parotid gland
acinar cells
pituitary
lung
foetus E15.5
eye
ovary
thymus
beta cells
small intestine
liver
spleen
bone marrow
heart
adipose tissue
brain stem
testis
placenta
bone
M.gastrocnemius
MIN6 cells
diaphragm
brain cortex
ES Cells
adrenal gland