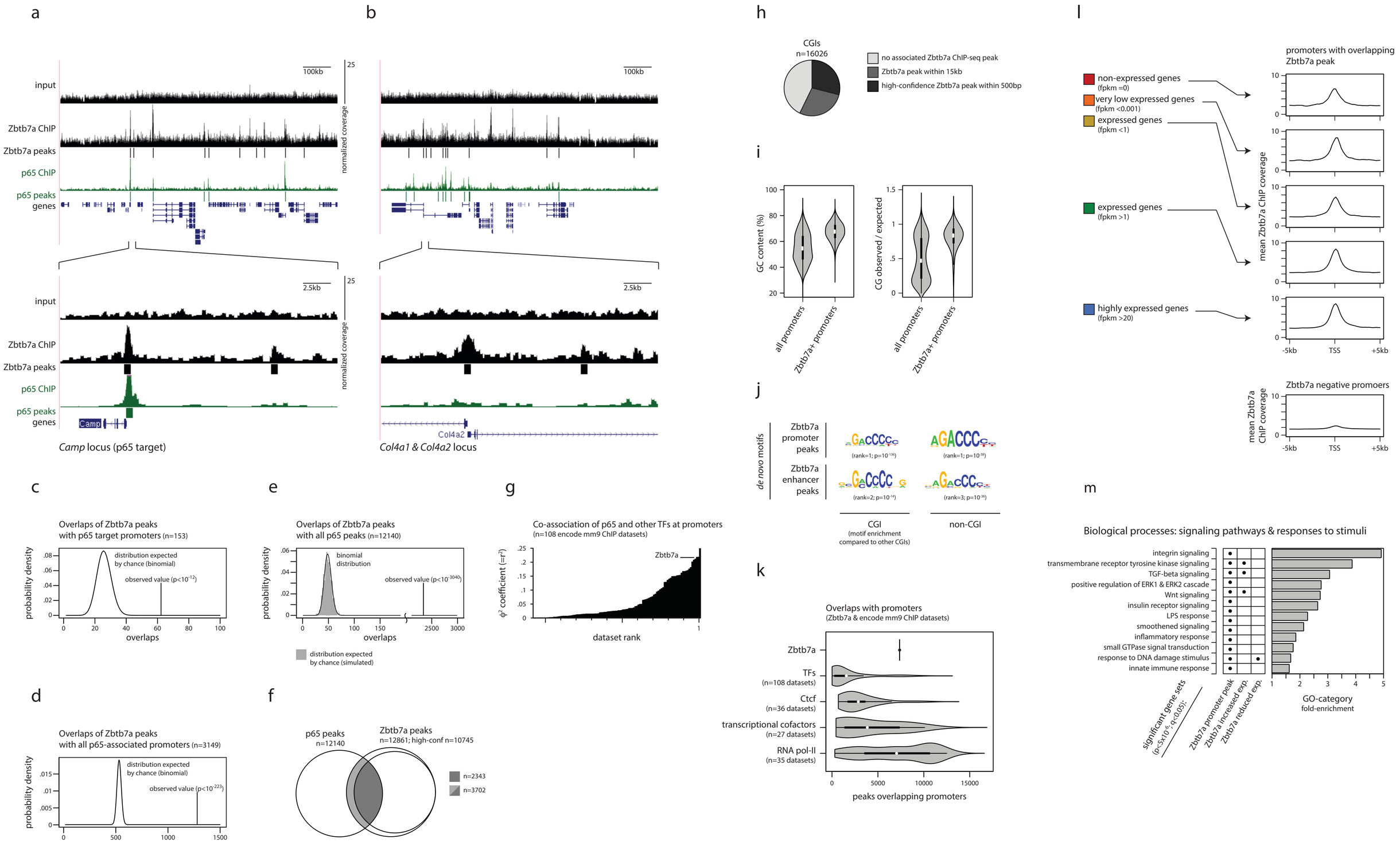
Figure S2


a
b
h
i
j
l
c
e
g
k
m
input
Zbtb7a ChIP
Zbtb7a peaks
p65 ChIP
p65 peaks
genes
100kb
2.5kb
normalized coverage
Camp
Col4a2
Camp locus (p65 target)
Col4a1 & Col4a2 locus
CGIs
n=16026
no associated Zbtb7a ChIP-seq peak
Zbtb7a peak within 15kb
high-confidence Zbtb7a peak within 500bp
GC content (%)
CG observed / expected
all promoters
Zbtb7a+ promoters
non-expressed genes
(fpkm =0)
very low expressed genes
(fpkm <0.001)
expressed genes
(fpkm <1)
expressed genes
(fpkm >1)
highly expressed genes
(fpkm >20)
promoters with overlapping
Zbtb7a peak
mean Zbtb7a ChIP coverage
-5kb
TSS
+5kb
Zbtb7a negative promoers
de novo motifs
Zbtb7a
promoter
peaks
Zbtb7a
enhancer
peaks
CGI
(motif enrichment
compared to other CGIs)
non-CGI
Overlaps of Zbtb7a peaks
with p65 target promoters (n=153)
probability density
distribution expected
by chance (binomial)
observed value (p<10^-12)
overlaps
Overlaps of Zbtb7a peaks
with all p65 peaks (n=12140)
binomial
distribution
observed value (p<10^-3040)
distribution expected
by chance (simulated)
Co-association of p65 and other TFs at promoters
(n=108 encode mm9 ChIP datasets)
Zbtb7a
dataset rank
Overlaps with promoters
(Zbtb7a & encode mm9 ChIP datasets)
Zbtb7a
TFs
(n=108 datasets)
Ctcf
(n=36 datasets)
transcriptional cofactors
(n=27 datasets)
RNA pol-II
(n=35 datasets)
peaks overlapping promoters
Biological processes: signaling pathways & responses to stimuli
integrin signaling
transmembrane receptor tyrosine kinase signaling
TGF-beta signaling
positive regulation of ERK1 & ERK2 cascade
Wnt signaling
insulin receptor signaling
LPS response
smoothened signaling
inflammatory response
small GTPase signal transduction
response to DNA damage stimulus
innate immune response
significant gene sets
Zbtb7a promoter peak
Zbtb7a increased exp.
Zbtb7a reduced exp.
GO-category
fold-enrichment
d
f
Overlaps of Zbtb7a peaks
with all p65-associated promoters (n=3149)
distribution expected
by chance (binomial)
observed value (p<10^-223)
p65 peaks
n=12140
Zbtb7a peaks
n=12861; high-conf n=10745
n=2343
n=3702