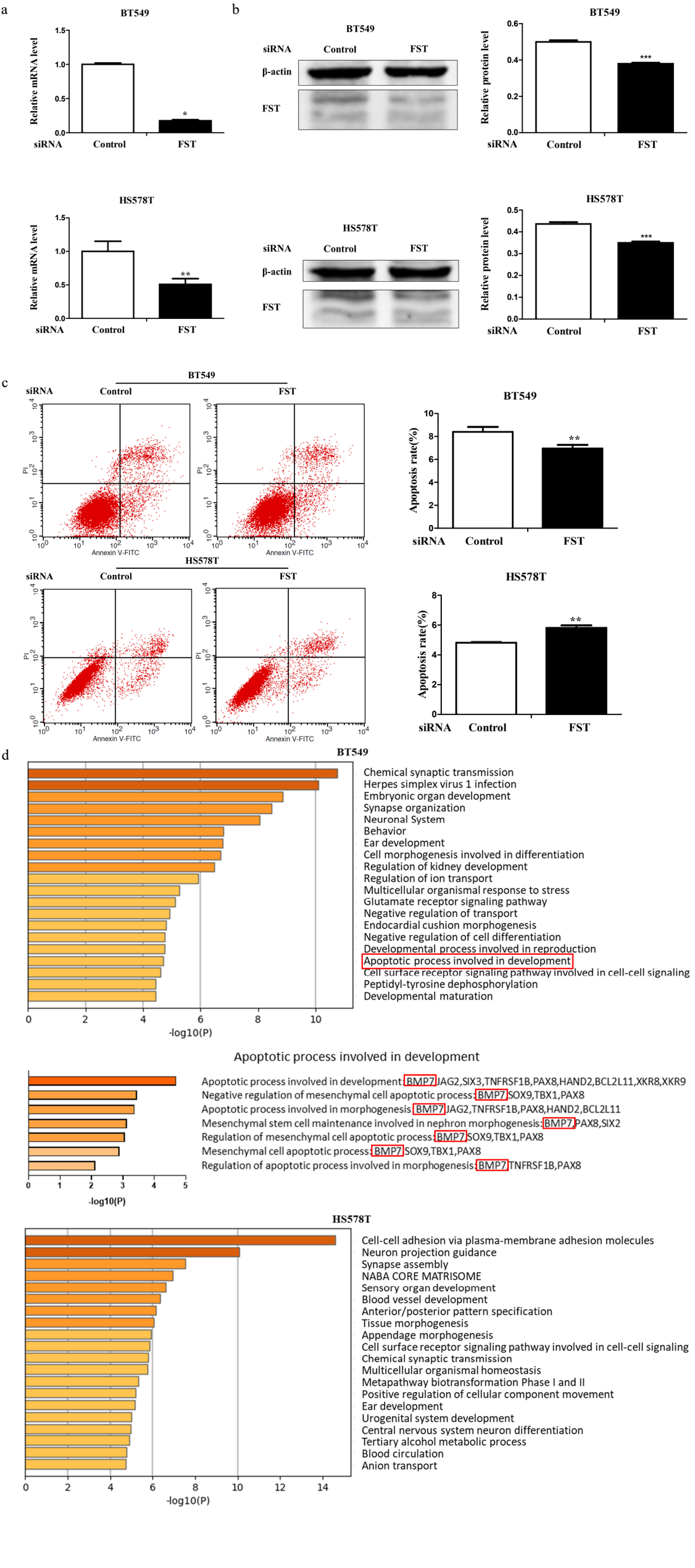
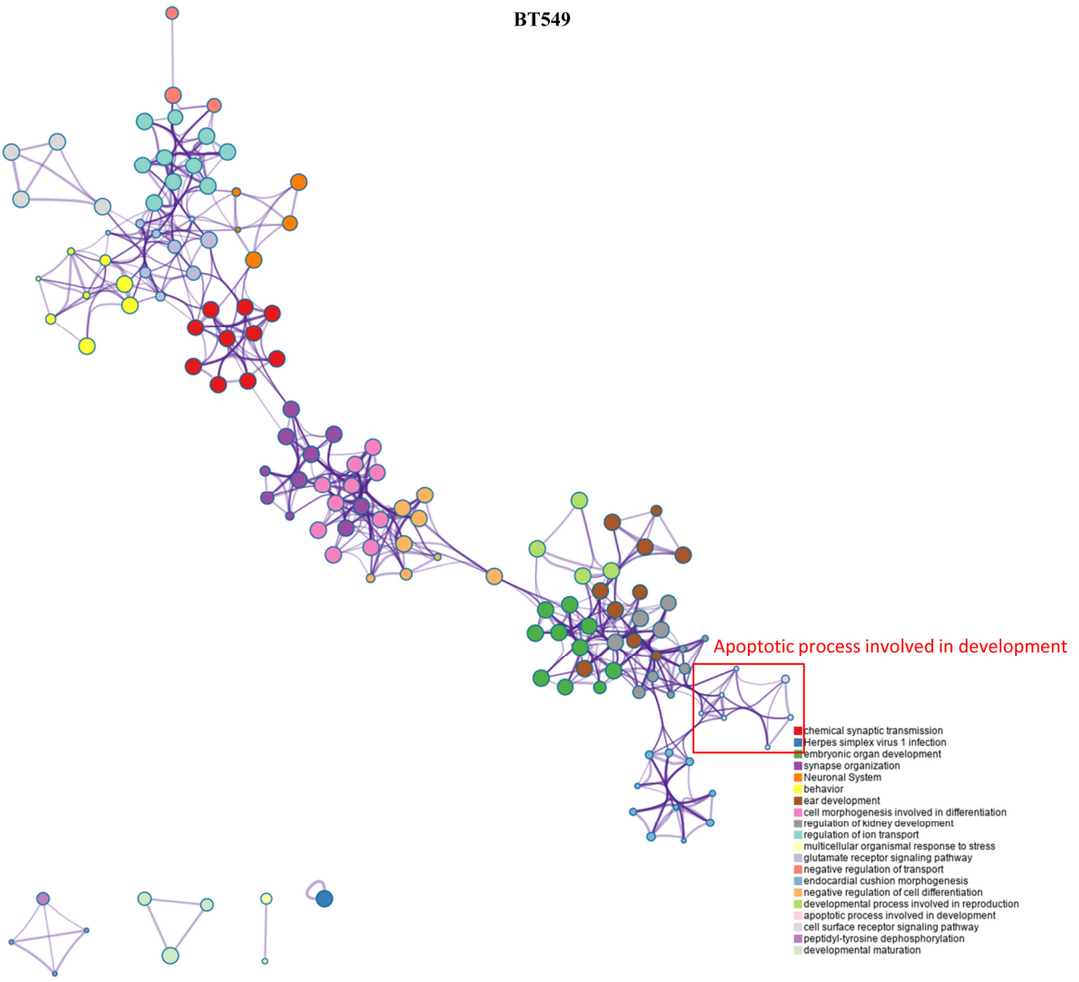
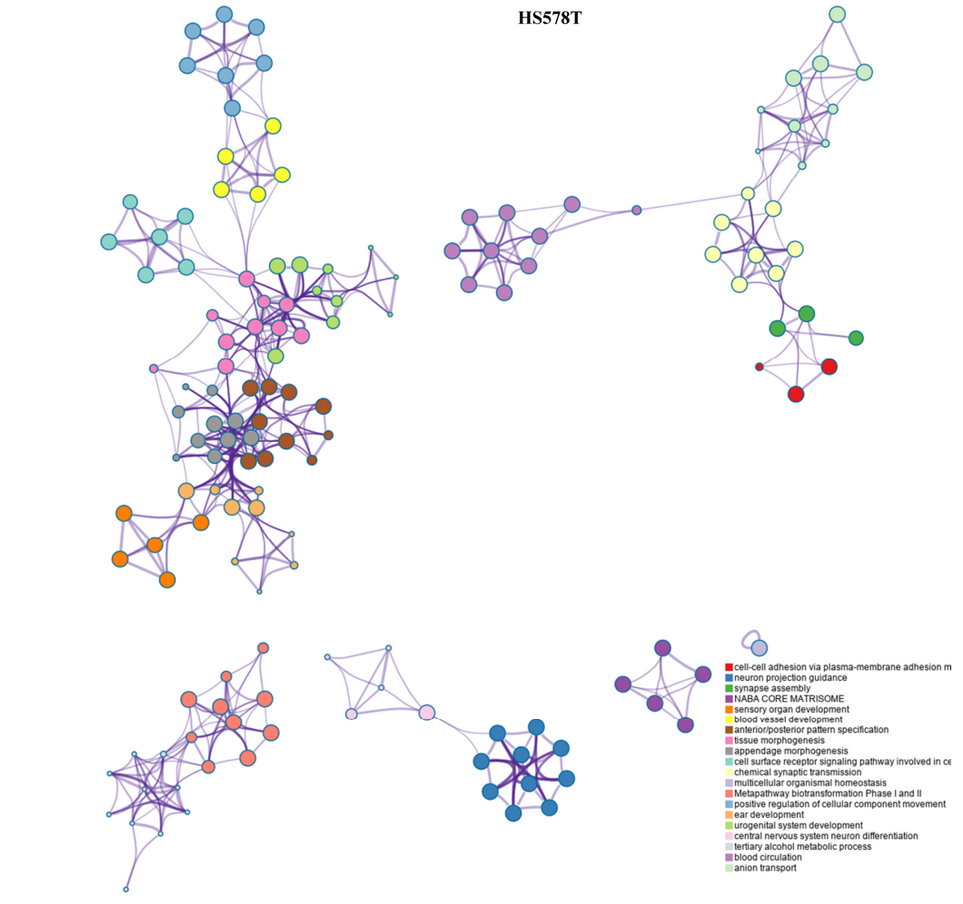
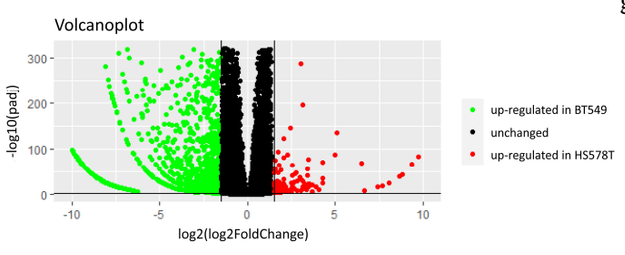

a
BT549
Relative mRNA level
1.5
1.0
0.5
0.0
*
siRNA
Control
FST
HS578T
**
b
BT549
siRNA
Control
FST
β-actin
FST
Relative protein level
0.6
0.4
0.2
0.0
***
HS578T
0.5
0.4
0.3
0.2
0.1
c
BT549
PI
Annexin V-FITC
Apoptosis rate(%)
10
8
6
4
2
0
HS578T
d
BT549
Chemical synaptic transmission
Herpes simplex virus 1 infection
Embryonic organ development
Synapse organization
Neuronal System
Behavior
Ear development
Cell morphogenesis involved in differentiation
Regulation of kidney development
Regulation of ion transport
Multicellular organismal response to stress
Glutamate receptor signaling pathway
Negative regulation of transport
Endocardial cushion morphogenesis
Negative regulation of cell differentiation
Developmental process involved in reproduction
Apoptotic process involved in development
Cell surface receptor signaling pathway involved in cell-cell signaling
Peptidyl-tyrosine dephosphorylation
Developmental maturation
0
2
4
6
8
10
-log10(P)
Apoptotic process involved in development
Apoptotic process involved in development:BMP7,JAG2,SIX3,TNFRSF1B,PAX8,HAND2,BCL2L11,XKR8,XKR9
Negative regulation of mesenchymal cell apoptotic process:BMP7,SOX9,TBX1,PAX8
Apoptotic process involved in morphogenesis:BMP7,JAG2,TNFRSF1B,PAX8,HAND2,BCL2L11
Mesenchymal stem cell maintenance involved in nephron morphogenesis:BMP7,PAX8,SIX2
Regulation of mesenchymal cell apoptotic process:BMP7,SOX9,TBX1,PAX8
Mesenchymal cell apoptotic process:BMP7,SOX9,TBX1,PAX8
Regulation of apoptotic process involved in morphogenesis:BMP7,TNFRSF1B,PAX8
0
1
2
3
4
5
-log10(P)
HS578T
Cell-cell adhesion via plasma-membrane adhesion molecules
Neuron projection guidance
Synapse assembly
NABA CORE MATRISOME
Sensory organ development
Blood vessel development
Anterior/posterior pattern specification
Tissue morphogenesis
Appendage morphogenesis
Cell surface receptor signaling pathway involved in cell-cell signaling
Chemical synaptic transmission
Multicellular organismal homeostasis
Metapathway biotransformation Phase I and II
Positive regulation of cellular component movement
Ear development
Urogenital system development
Central nervous system neuron differentiation
Tertiary alcohol metabolic process
Blood circulation
Anion transport
0
2
4
6
8
10
12
14
-log10(P)

e

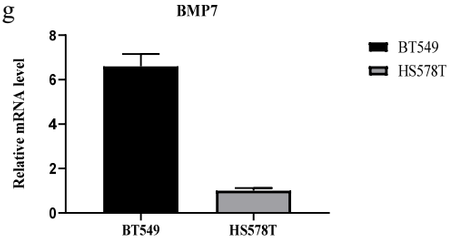

BT549
Apoptotic process involved in development
chemical synaptic transmission
Herpes simplex virus 1 infection
embryonic organ development
synapse organization
Neuronal System
behavior
ear development
cell morphogenesis involved in differentiation
regulation of kidney development
regulation of ion transport
multicellular organismal response to stress
glutamate receptor signaling pathway
negative regulation of transport
endocardial cushion morphogenesis
negative regulation of cell differentiation
developmental process involved in reproduction
apoptotic process involved in development
cell surface receptor signaling pathway
peptidyl-tyrosine dephosphorylation
developmental maturation


HS578T
cell-cell adhesion via plasma-membrane adhesion m
neuron projection guidance
synapse assembly
NABA CORE MATRISOME
sensory organ development
blood vessel development
anterior/posterior pattern specification
tissue morphogenesis
appendage morphogenesis
cell surface receptor signaling pathway involved in ce
chemical synaptic transmission
multicellular organismal homeostasis
Metapathway biotransformation Phase I and II
positive regulation of cellular component movement
ear development
urogenital system development
central nervous system neuron differentiation
tertiary alcohol metabolic process
blood circulation
anion transport

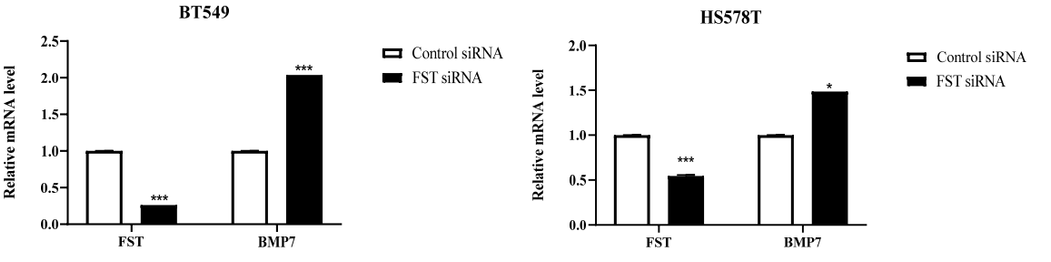
f


Volcanoplot
-log10(padj)
log2(log2FoldChange)
up-regulated in BT549
unchanged
up-regulated in HS578T

g


BMP7
Relative mRNA level
BT549
HS578T

h


BT549
Relative mRNA level
Control siRNA
FST siRNA
FST
BMP7
HS578T
Relative mRNA level
Control siRNA
FST siRNA
FST
BMP7