Table S3. Top 5 biological functions enriched in the benefited genes by EBT.

P-values for enrichment were calculated by Fisher's exact tests.

Category	Gene Set	P-Value
Canonical Pathways	Immune System	$6.15 \times 10^{-28}$
	Cytokine Signaling in Immune System	$2.19 \times 10^{-21}$
	Interferon Signaling	$6.98 \times 10^{-15}$
	Metabolism of RNA	$1.36 \times 10^{-13}$
	Metabolism of mRNA	$9.45 \times 10^{-12}$
Gene Ontology Biological Processes	Bipolymer Metabolic Processes	3.27x10 <sup>-19</sup>
	Protein Metabolic Process	$5.29 \times 10^{-15}$
	Cellular Macromolecule Metabolic Process	$4.07 \times 10^{-14}$
	Nucleobase/side/tide and Nucleic Acid Metabolic Processes	$1.95 \times 10^{-16}$
	Cellular Macromolecule Metabolic Process	$2.16 \times 10^{-13}$