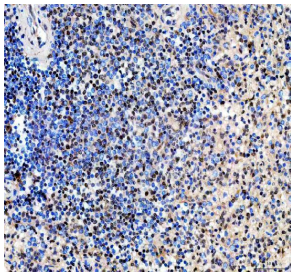
EBF Antibody / EBF1 EBF2 EBF3 EBF4 Polyclonal Antibody (FY13554)

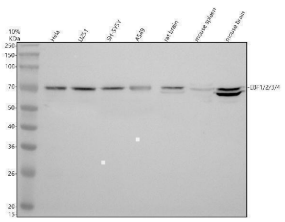
Catalog No.	Formulation	Size
FY13554	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9UH73
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml ELISA: 0.1-0.5 ug/ml
Limitations	This EBF1/2/3/4 Antibody / Transcription factor COE1 Antibody is supplied exclusively for research use.



EBF Antibody by IHC in human spleen. Immunohistochemistry of formalin-fixed, paraffin-embedded human spleen using EBF1 EBF2 EBF3 EBF4 Polyclonal Antibody reveals brown immunoreactivity among cells distributed throughout the splenic tissue. Staining includes nuclear-associated labeling in subsets of cells, against blue hematoxylin counterstaining. Sections underwent heat-induced epitope retrieval in EDTA buffer at pH 8.0, followed by blocking with 10% goat serum. Primary antibody was applied at 2 ug/mL overnight at 4oC, and immunoreactivity was visualized using an HRP-conjugated secondary antibody and DAB chromogen. The image illustrates EBF-family-associated staining in human spleen.



EBF Antibody by WB in human and rodent lysates. Western blot analysis using EBF1 EBF2 EBF3 EBF4 Polyclonal Antibody detects a band near 70 kDa in human HeLa (lane 1), U251 (lane 2), SH-SY5Y (lane 3) and A549 (lane 4) cells, rat brain (lane 5), mouse spleen (lane 6) and mouse brain (lane 7). The observed migration is above the approximately 64 kDa calculated mass and is consistent with 70 kDa bands reported in independent antibody validation data. Reduced samples containing 30 ug protein per lane were resolved by 10% SDS-PAGE. Primary antibody was applied at 0.5 ug/mL overnight at 4oC before chemiluminescent detection.

Description

EBF Antibody / EBF1 EBF2 EBF3 EBF4 Polyclonal Antibody detects members of the early B-cell factor family, which comprises four related transcription factors, EBF1, EBF2, EBF3, and EBF4. These proteins are members of the COE family, named for Collier, Olf-1, and EBF, and share a conserved DNA-binding domain. They regulate transcription by binding selected DNA sequences and cooperating with other factors that determine cell identity. Although the proteins share structural features, their expression patterns and physiological functions are not identical. EBF1 is particularly well characterized as a regulator of B-cell lineage specification and differentiation, whereas other family members contribute to distinct developmental programs.

EBF1 helps establish and maintain transcriptional networks required for B-cell development. It works alongside lineage-associated factors and regulates genes involved in lymphocyte identity and maturation. EBF2 has been implicated in neuronal differentiation and adipocyte biology, including programs associated with brown fat identity. EBF3 contributes to neural development and has been associated with transcriptional control in several developmental contexts. EBF4 is less extensively characterized, but belongs to the same conserved family of transcriptional regulators. Family membership does not mean that each protein controls an identical set of genes, because DNA-binding context, cofactors, and cell-specific chromatin environments influence target selection.

EBF proteins illustrate how related transcription factors can combine conserved molecular architecture with specialized biological roles. Their activities are influenced by expression timing, chromatin accessibility, and interactions with other regulatory proteins. Altered regulation of individual EBF genes has been studied in developmental disorders and disease-associated transcriptional programs, although the significance of any change depends on the particular family member. The collective designation EBF1/2/3/4 describes the protein family and should not be interpreted as evidence of equivalent antibody binding to each member. NSJ Bioreagents includes this family-associated target in its antibody catalog. An EBF Antibody is relevant to understanding COE-family transcriptional regulation and the distinct roles of early B-cell factor proteins.

Explore related research targets in our Developmental Biology Antibodies collection.

Application Notes

Users should optimize the working dilution of the EBF1/2/3/4 Antibody / Transcription factor COE1 Antibody for their specific experimental setup.

Immunogen

The EBF Antibody was generated using e. coli-derived human EBF1/2/3/4 recombinant protein (amino acids D76-P568).

Storage

Once reconstituted, refrigerate the EBF1/2/3/4 Antibody at 4oC for no longer than one month. For extended storage, freeze aliquots at -20oC for up to six months and avoid repeated freeze-thaw cycles.

Alternate Names

EBF1/2/3/4 antibody, Transcription factor COE1 antibody, EBF transcription factor 1 antibody, COE1 antibody, Early B cell factor antibody, early B cell factor 1 antibody, EBF antibody, EBF1 antibody, O/E 1 antibody, OE 1 antibody, OLF1 antibody, EBF2 antibody

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