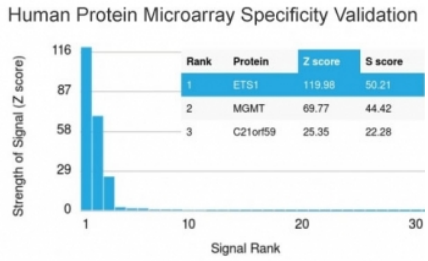
ETS1 Antibody / Protein C-ets-1 [clone ETS1/1801] (V7758)

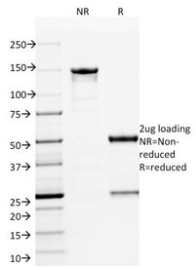
Catalog No.	Formulation	Size
V7758-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7758-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7758SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	ETS1/1801
Purity	Protein G affinity chromatography
UniProt	P14921
Applications	ELISA (order BSA-free Format For Coating) :
Limitations	This ETS1 antibody is available for research use only.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using ETS1 antibody (clone ETS1/1801). These results demonstrate the foremost specificity of the ETS1/1801 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free ETS1 antibody (clone ETS1/1801) as confirmation of integrity and purity.

Description

ETS1 antibody targets Protein C-ets-1, a nuclear transcription factor encoded by the ETS1 gene and a founding member of the ETS family of transcription factors. Protein C-ets-1, also commonly referred to as ETS proto-oncogene 1, ETS-1 transcription factor, or simply ETS-1, plays a central role in regulating gene expression programs involved in cell differentiation, proliferation, and survival. ETS1 is predominantly localized to the nucleus, where it binds specific DNA motifs containing the core GGAA/T sequence to modulate transcriptional activity in response to extracellular signaling cues.

Protein C-ets-1 is highly expressed in lymphoid cells, endothelial cells, and certain epithelial cell populations, reflecting its importance in immune regulation and vascular biology. ETS1 functions downstream of multiple signaling pathways, including MAPK and calcium-dependent signaling, allowing it to integrate environmental stimuli into transcriptional responses. Through these mechanisms, ETS1 regulates genes involved in cytokine production, extracellular matrix remodeling, and cell adhesion, processes that are critical for normal immune function and tissue homeostasis.

From a structural perspective, Protein C-ets-1 contains a conserved ETS DNA-binding domain near its C-terminus, which mediates sequence-specific interaction with target promoters and enhancers. Additional regulatory regions enable protein-protein interactions with cofactors and other transcriptional regulators, fine-tuning ETS1 activity in a context-dependent manner. Post-translational modifications, including phosphorylation, further influence its transcriptional potency and stability, contributing to dynamic regulation across different cell types and activation states.

Aberrant ETS1 expression or activity has been associated with pathological conditions, particularly in cancer and inflammatory diseases. Elevated ETS1 levels have been reported in several tumor types, where Protein C-ets-1 can promote invasive behavior by regulating genes involved in angiogenesis, matrix degradation, and cell migration. In the immune system, dysregulated ETS1 signaling has been linked to altered lymphocyte development and autoimmune responses, underscoring its dual roles in both oncogenic and immunological contexts.

Given its nuclear localization and well-defined transcriptional functions, ETS1 antibody reagents are valuable tools for studying transcriptional regulation, immune cell biology, and disease-associated signaling pathways. An ETS1 antibody enables detection of Protein C-ets-1 expression patterns in normal and diseased tissues, supporting research applications focused on gene regulation, tumor biology, and immune system function.

Application Notes

Optimal dilution of the ETS1 antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein (amino acids 137-230) was used as the immunogen for the ETS1 antibody.

Storage

Store the ETS1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).