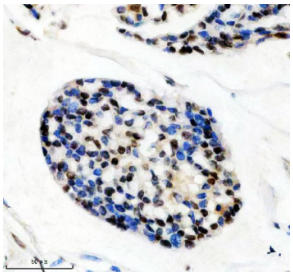
HIV Tat-specific factor 1 Antibody / HTATSF1 [clone 25H56] (FY13433)

Catalog No.	Formulation	Size
FY13433	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

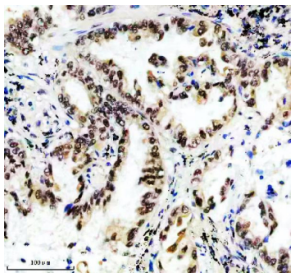
Recombinant RABBIT MONOCLONAL

Bulk quote request

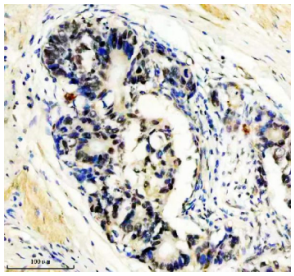
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	25H56
Purity	Purified
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	O43719
Localization	Nuclear
Applications	Western blot: 1:500-1:2000 Immunohistochemistry: 1:50-1:200 Immunoprecipitation: 1:50
Limitations	This HIV Tat-specific factor 1 antibody is available for research use only.



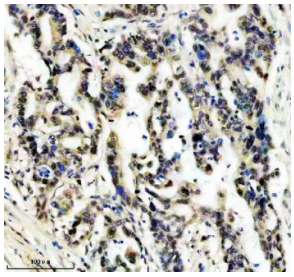
Immunohistochemical staining of FFPE human breast cancer tissue using HIV Tat-specific factor 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



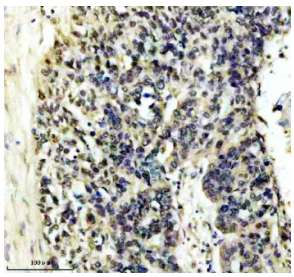
Immunohistochemical staining of FFPE human lung cancer tissue using HIV Tat-specific factor 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



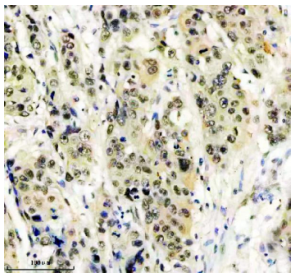
Immunohistochemical staining of FFPE human stomach cancer tissue using HIV Tat-specific factor 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



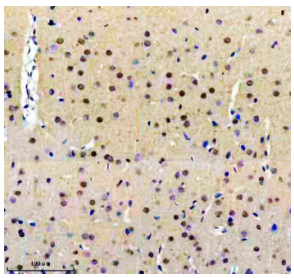
Immunohistochemical staining of FFPE human pancreas cancer tissue using HIV Tat-specific factor 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



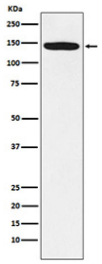
Immunohistochemical staining of FFPE human ovarian cancer tissue using HIV Tat-specific factor 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



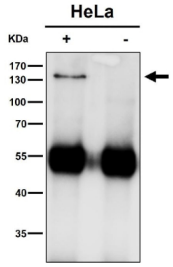
Immunohistochemical staining of FFPE human esophageal cancer tissue using HIV Tat-specific factor 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunohistochemical staining of FFPE rat brain tissue using HIV Tat-specific factor 1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis using HIV Tat-specific factor 1 antibody. Lane 1: human Jurkat whole cell lysate. The predicted molecular weight of HIV Tat-specific factor 1 (HTATSF1) is ~86 kDa, while HIV Tat-specific factor 1 antibody detects a prominent band at ~140 kDa on SDS-PAGE, consistent with the commonly reported apparent migration of Tat-SF1 as an approximately 130-140 kDa phosphorylated protein.



Immunoprecipitation of HIV Tat-specific factor 1 protein from 500ug of human HeLa whole cell lysate with 2ug of HIV Tat-specific factor 1 antibody. The predicted molecular weight of HIV Tat-specific factor 1 (HTATSF1) is ~86 kDa, while HIV Tat-specific factor 1 antibody detects a band at ~140 kDa on SDS-PAGE, consistent with the commonly reported apparent migration of Tat-SF1 as an approximately 130-140 kDa phosphorylated protein.

Description

HIV Tat-specific factor 1 antibody targets HIV Tat-specific factor 1, encoded by the HTATSF1 gene on chromosome 17q21.31. HIV Tat-specific factor 1 is a nuclear regulatory protein that functions at the intersection of transcription elongation and RNA processing. Although first identified for its role in supporting HIV-1 Tat-mediated transcription, HIV Tat-specific factor 1 is now recognized as a broader host factor that contributes to efficient gene expression in mammalian cells.

Functionally, HIV Tat-specific factor 1 participates in regulation of RNA polymerase II elongation rather than transcription initiation. It associates with elongating transcription complexes and supports productive transcript synthesis across actively transcribed genes. In parallel, HIV Tat-specific factor 1 facilitates coordination between transcriptional elongation and RNA processing events, allowing efficient coupling of nascent RNA synthesis with downstream maturation steps. A HIV Tat-specific factor 1 antibody supports studies focused on transcriptional elongation dynamics and RNA metabolism.

HIV Tat-specific factor 1 localizes predominantly to the nucleus, where it interacts with components of the transcription and splicing machinery. The protein contains arginine-serine-rich regions and additional interaction motifs characteristic of RNA regulatory factors, enabling binding to RNA and protein partners within elongation and spliceosomal complexes. Alternative splicing of HTATSF1 transcripts may generate isoforms that modulate these regulatory activities in a context-dependent manner.

From a biological and disease-relevance perspective, accurate regulation of transcription elongation and RNA processing is essential for cellular homeostasis. Dysregulated activity of HIV Tat-specific factor 1 has been investigated in cancer, where aberrant transcriptional control contributes to altered gene expression programs. In viral infection models, HIV Tat-specific factor 1 remains relevant due to its ability to enhance Tat-dependent transcription, illustrating how host transcription factors can be co-opted to support viral replication.

At the molecular level, HIV Tat-specific factor 1 functions as a regulatory protein rather than an enzyme, acting through dynamic protein-protein and protein-RNA interactions. Post-translational regulation and complex assembly state can influence its functional behavior and apparent migration in biochemical assays without altering the primary amino acid sequence. HIV Tat-specific factor 1 antibody reagents support research applications focused on transcription elongation, RNA processing, and host-virus interactions, with NSJ Bioreagents providing reagents intended for research use.

Application Notes

Optimal dilution of the HIV Tat-specific factor 1 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human HIV Tat-specific factor 1 protein was used as the immunogen for the HIV Tat-specific factor 1 antibody.

Storage

After reconstitution, the HIV Tat-specific factor 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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