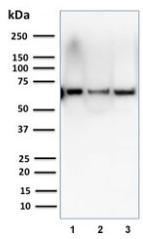
CSTF2T Antibody / Germ Cell RNA Processing Marker [clone PCRP-CSTF2T-1A3] (V8957)

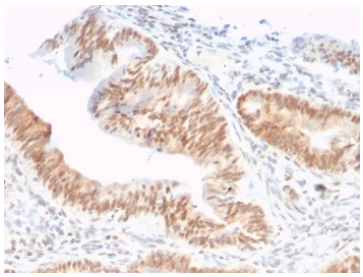
Catalog No.	Formulation	Size
V8957-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8957-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8957SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

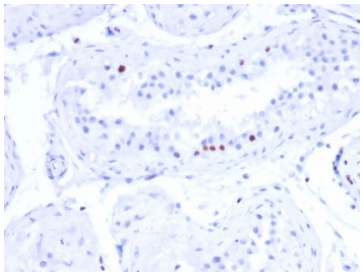
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	PCRP-CSTF2T-1A3
Purity	Protein A/G affinity
UniProt	Q9H0L4
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This CSTF2T Antibody / Germ Cell RNA Processing Marker is available for research use only.



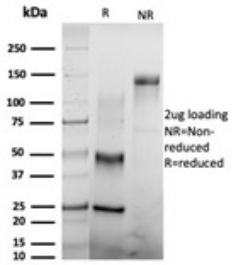
CSTF2T Antibody Breast Cancer Cell Line WB. Western blot analysis of human breast and melanoma cancer cell lysates using clone PCRP-CSTF2T-1A3. Lane 1: T47-D, Lane 2: SK-BR-3, Lane 3: A375. A band is detected at approximately 64 kDa, consistent with the predicted molecular weight of Cleavage stimulation factor subunit 2 tau / CSTF2T. The observed expression pattern supports the role of CSTF2T in RNA cleavage and polyadenylation pathways associated with post-transcriptional gene regulation in transformed cell populations.



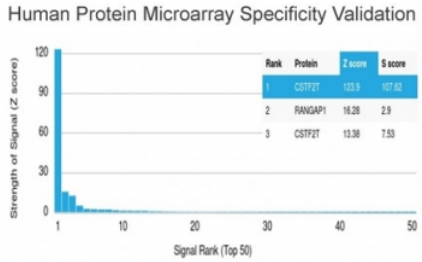
CSTF2T Antibody Colon Adenocarcinoma IHC. Immunohistochemistry analysis of FFPE human colon adenocarcinoma tissue stained with clone PCRP-CSTF2T-1A3. Tumor epithelial cells show prominent nuclear and perinuclear HRP-DAB brown staining, consistent with the known function of Cleavage stimulation factor subunit 2 tau / CSTF2T in nuclear RNA processing and mRNA maturation. Adjacent stromal cells show comparatively low background staining. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



CSTF2T Antibody Human Testis IHC. Immunohistochemistry analysis of FFPE human testis tissue stained with clone PCRP-CSTF2T-1A3. Scattered germ cell populations within seminiferous tubules display distinct nuclear HRP-DAB brown staining, aligning with the known testis-enriched expression profile of Cleavage stimulation factor subunit 2 tau / CSTF2T and its involvement in germ cell differentiation and spermatogenesis-associated RNA processing. Interstitial stromal cells show minimal background signal. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free CSTF2T antibody (PCRP-CSTF2T-1A3) as confirmation of integrity and purity.



CSTF2T Antibody Protein Microarray Validation. Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using clone PCRP-CSTF2T-1A3. These results demonstrate high specificity of the mouse monoclonal antibody for Cleavage stimulation factor subunit 2 tau / CSTF2T, a regulator of mRNA cleavage and alternative polyadenylation pathways. Z- and S-score analysis confirms strong preferential binding to the intended target relative to non-specific proteins represented on the HuProt(TM) array. The Z-score represents the signal strength generated by antibody binding to an individual protein relative to the overall array background, while the S-score reflects the relative specificity gap between the top-ranked target and subsequent proteins on the array.

Description

Cleavage stimulation factor subunit 2 tau (CSTF2T) is a testis-enriched RNA processing protein involved in mRNA 3-prime end cleavage and polyadenylation during post-transcriptional gene regulation. CSTF2T Antibody / Germ Cell RNA Processing Marker is useful for studying germ cell differentiation, RNA maturation pathways, and alternative polyadenylation mechanisms associated with reproductive biology and cancer research. CSTF2T antibody, also referred to as Cleavage stimulation factor subunit 2 tau antibody and testis RNA processing antibody in the literature, recognizes a member of the cleavage stimulation factor complex associated with tissue-restricted RNA processing programs.

CSTF2T is primarily expressed in male germ cells and has been linked to spermatogenesis-associated transcriptional and post-transcriptional regulation. The protein is predominantly localized within the nucleus where it contributes to pre-mRNA processing and regulation of transcript stability. CSTF2T belongs to the cleavage stimulation factor family and participates in coordinated mRNA cleavage and polyadenylation events that influence transcript diversity and gene expression timing during cellular differentiation. Alternative polyadenylation regulated by CSTF2T has been associated with developmental stage-specific gene expression programs and reproductive tissue specialization.

Beyond reproductive tissues, CSTF2T expression has also been reported in selected tumor types and transformed cell populations, supporting investigation into RNA processing alterations associated with malignancy. Immunohistochemistry analysis commonly demonstrates nuclear staining patterns in germ cell populations and epithelial tumor cells, consistent with its role in nuclear RNA maturation pathways. A mouse monoclonal clone PCRP-CSTF2T-1A3 antibody can be used to study CSTF2T expression in tissue sections, western blot analysis, protein microarray specificity validation studies, and additional molecular research applications focused on RNA biology and germ cell regulation.

Because CSTF2T functions in post-transcriptional gene regulation, this target is relevant to studies examining mRNA processing fidelity, transcript isoform diversity, developmental gene expression, and reproductive system biology. Ongoing interest in alternative polyadenylation pathways has increased the importance of CSTF2T as a research marker in molecular pathology, germ cell differentiation studies, and RNA processing research models. A selection of CSTF2T antibody products is available to support a range of research applications.

Researchers studying post-transcriptional gene regulation, alternative polyadenylation, and RNA-mediated signaling pathways may also be interested in our broader Signal Transduction Antibodies collection featuring targets involved in cellular communication, transcriptional control, and developmental signaling networks.

Application Notes

Optimal dilution of the CSTF2T Antibody / Germ Cell RNA Processing Marker should be determined by the researcher.

Immunogen

Recombinant full-length human CSTF2T protein was used as the immunogen for the CSTF2T antibody.

Storage

Aliquot the CSTF2T antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CSTF2T germ cell antibody, Cleavage stimulation factor subunit 2 tau antibody, Testis RNA processing antibody, Polyadenylation factor antibody, RNA cleavage factor antibody