R&D SYSTEMS
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Human UTF1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF3958

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human UTF1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human UTF1 Ser44-Lys153 Accession # Q5T230
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

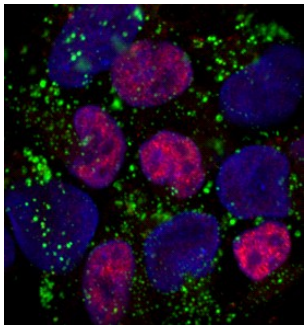
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human UTF1
Immunocytochemistry	5-15 µg/mL	See Below

DATA

Immunocytochemistry



UTF1 in BG01V Human Embryonic Stem Cells. UTF1 was detected in immersion fixed BG01V human embryonic stem cells using Goat Anti-Human UTF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3958) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001). SSEA4 was also detected using Mouse Anti-Human SSEA4 Monoclonal Antibody (Catalog # MAB1435) and stained using the NorthernLights™ 493-conjugated Anti-Goat IgG Secondary Antibody (green; Catalog # NL003). Cells were counterstained with DAPI (blue). Specific staining of UTF1 was localized to nuclei. View our protocol for Fluorescent ICC Staining of Stem Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

UTF1 (undifferentiated embryonic cell transcription factor 1) is a 47-57 kDa transcriptional coactivator. It is expressed mainly in embryonic stem cells, is regulated by Oct-3/4, and promotes rapid cell proliferation. Human UTF1 is a 341 amino acid (aa) phosphoprotein. It is rich in Proline and Arginine residues and contains a C-terminal Leu-zipper (aa 286-313) that is known to interact with the metal-binding motif of ATF-2. Unlike mouse UTF1 which contains an alternate start site at Met43, human UTF1 lacks this Methionine and shows only one isoform. Over amino acids 44-153, human UTF1 shares 81% aa sequence identity with mouse UTF1.

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