

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Mouse                                                                                                                                                |
| <b>Specificity</b>                                                                                                                                                                                      | Detects mouse UTF1 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human UTF1 is observed. |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                                                                                 |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                                                                            |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant mouse UTF1<br>Lys50-Ser171<br>Accession # Q6J1H4                                                                 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 350<br>Excitation Wavelength: 346 nm<br>Emission Wavelength: 442 nm                                                                      |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                                                         |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                                                                      |

## 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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Flow Cytometry</b>      | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

UTF1 (Undifferentiated embryonic cell Transcription Factor 1) is a 47-49 kDa member of Leu-zipper family of proteins. It is expressed in the early embryonic inner cell mass and primitive ectoderm, and disappears following the formation of the primitive streak. In this regard, UTF1 has been shown to be chromatin-associated and to participate in the proper differentiation of embryonic stem cells. It also is expressed in basal keratinocytes, and hair follicle matrix cells. UTF1 acts as a transcriptional coactivator of ATF2 (Activating Transcription factor 2), a bZIP family protein that interacts with CRE in gene promoters. Mouse UTF1 is 399 amino acids (aa) in length. It contains two conserved domains (aa 52-167 and aa 269-332), the latter which is key to ATF2 activation. There is one alternative start site at Met43 that generates a 39 kDa isoform. Over aa 18-423, mouse UTF1 shares 81% and 95% aa sequence identity with human and rat UTF1, respectively.

## PRODUCT SPECIFIC NOTICES

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