

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>        | Detects human and mouse ZNF281 in Western blots.                                                                                                                                                                                                                            |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human ZNF281<br>aa 681-895<br>Accession # Q9Y2X9                                                                                                                                                                                        |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

**Western Blot** 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

ZNF281 (zinc finger protein 281; also ZBP99 and GZP1) is a 100 kDa member of the Krueppel C2H2-type Zn-finger family of proteins. It is found in embryonic stem cells, placenta, and lymphocytes, and appears to be necessary for the maintenance of pluripotency in stem cells. ZNF281 both represses (STAT3) and activates (Nanog) multiple genes, and is known to form a complex with Nanog, Oct4 and Sox2. Human ZNF281 is 895 amino acids in length. It contains one Gly-rich region (aa 4-37), a poly-Pro motif (aa 90-96) and four consecutive C2H2-type zinc finger domains (aa 261-367). There are phosphorylation sites at Ser255, 395, 484, 785 and 807. Potential alternate start sites exist at Met296 and Met434. Over aa 681-895, human ZNF281 shares 99% aa identity with mouse ZNF281.

#### PRODUCT SPECIFIC NOTICES

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