

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse FoxP2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) FoxP1, rhFoxP3, and rhFoxP4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human FoxP2 isoform 1 Ala640-Glu715 Accession # O15409
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	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human FoxP2 by Western Blot. Western blot shows lysates of A172 human glioblastoma cell line and human lung tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse FoxP2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5647) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for FoxP2 at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunocytochemistry</p>  <p>FoxP2 in HeLa Human Cell Line. FoxP2 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using 10 µg/mL Sheep Anti-Human/Mouse FoxP2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5647) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red, upper panel; Catalog # NL010) and counterstained with DAPI (blue, lower panel). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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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. <ul style="list-style-type: none"> ● 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

FoxP2 (Forkhead box protein P2; also CAGH44) is an 85-95 kDa member of the winged helix transcription factor gene family. It is a transcriptional repressor that is expressed principally in gut and lung epithelium, and in neurons involved in speech and language. Human FoxP2 is 715 amino acids (aa) in length. It contains a huge poly-Gln region (aa 123-231), a C2H2 Zn-finger domain (aa 346-371), a Leu-zipper segment (aa 388-409) and a forkhead DNA binding domain (aa 504-594). FoxP2 both homodimerizes and heterodimerizes with FoxP1 and P4, and binds CTBP1. There are multiple splice variants. There is an alternate start site at Met93, an 11 aa substitution for aa 57-715, a 25 aa insert after Gln86, an 11 aa substitution for aa 133-715, and a ten aa substitution for aa 423-715. Over aa 587-715, human and mouse FoxP2 are (100%) identical in aa sequence.