

DESCRIPTION

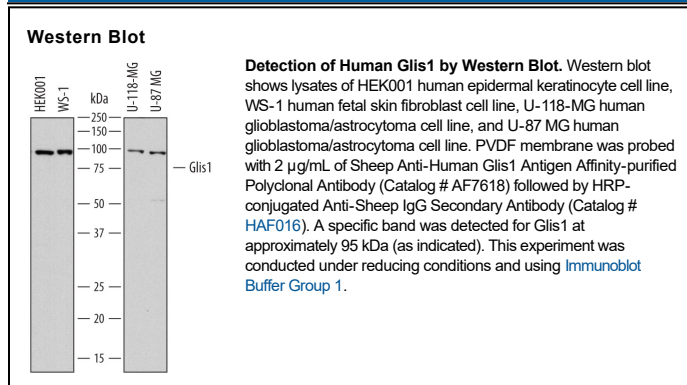
Species Reactivity	Human
Specificity	Detects human Glis1 in direct ELISAs and Western blots. In direct ELISAs, approximately 60% cross-reactivity with recombinant mouse Glis1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Glis1 Met446-Thr620 Accession # Q5VTL4
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 either lyophilized or 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	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

Glis1 (GLI/glioma-Similar 1; also GliH1) is a 66 kDa (predicted) member of the Kruppel-like zinc finger family of proteins. In the adult, it is principally expressed in placenta and kidney, while in the embryo, it has widespread expression in mesodermal structures. Glis1 can be induced in suprabasal keratinocytes by activating cytokines, and is believed to promote a unique differentiation program. Glis1 is also effective in generating iPSCs from somatic cells (fibroblasts) when concurrently expressed with Oct3, Sox2 and Klf4. Multiple reprogramming pathways are involved, and include Myc, Wnt and Nanog molecules. Functionally, Glis1 is believed to act as a transcriptional repressor. Although it has been described as possessing an activation domain, it would appear that gene promotion is a consequence of the repression of a "repressor". The consequence sequence ACCACCCA corresponds to a GLIS binding motif. Human Glis1 is 620 amino acids (aa) in length. Based on mouse, it contains a zinc-finger repressor region (aa 197-346) plus a putative transactivation domain (aa 448-620). And again based on mouse, there might be an approximately 796 aa splice form that shows an alternative start site 171 aa upstream of the 620 aa isoform. The existence of such an isoform would generate an approximately 95-100 kDa isoform in SDS-PAGE. Over aa 446-620, human Glis1 shares 80% aa sequence identity with mouse Glis1.