

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pref-1/DLK-1/FA1 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse Pref-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Pref-1 long isoform Ala24-Pro297 with Arg248Pro and Lys295Ser substitutions Accession # AAA75364
Endotoxin Level	<0.1 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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 Pref-1/DLK-1/FA1

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.
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 from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

BACKGROUND

Pref-1 (Preadipocyte factor 1; also DLK-1 and FA1) is a 58-65 kDa member of the Notch/Serrata/Delta family of proteins. It is expressed in prechondrocytes and preadipocytes and appears to block progenitor cell differentiation into mature cell lineages. Mature human Pref-1 is a 360 amino acid (aa) type I transmembrane N- and O-linked glycoprotein. It contains a 280 aa extracellular region (aa 24-303), a 24 aa transmembrane segment (aa 304-327), and a 56 aa cytoplasmic domain (aa 328-383). The extracellular region contains six EGF-like domains, and undergoes proteolytic cleavage to generate a bioactive 50 kDa fragment, plus three 25-31 kDa fragments that show no activity. There are multiple potential splice variants. One shows a deletion of aa 229-301, a second possesses a six aa substitution for aa 1-52, a third shows a deletion of aa 210-277, while a fourth contains a six aa substitution for aa #207-383. Over aa 24-297, human Pref-1 shares 82% aa identity with mouse Pref-1.