Human PILR-α Antibody

Monoclonal Mouse IgG_{2A} Clone # 462415

Catalog Number: MAB6484

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PILR-α in direct ELISAs and Western blots. No cross-reactivity with recombinant human PILR-β, recombinant mouse (rm) PILR-α, or rmPILR-β is observed.
Source	Monoclonal Mouse IgG_{2A} Clone # 462415
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human PILR-α Gln20-Thr196 (predicted) Accession # Q9UKJ1
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.

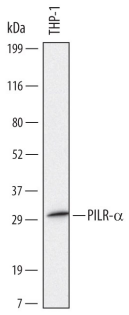
APPLICATIONS

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	2 µg/mL	See Below

DATA

Western Blot



Detection of Human PILR-α by Western Blot. Western blot shows lysates of THP-1 human acute monocytic leukemia cell line. PVDF Membrane was probed with 2 µg/mL of Human PILR-α Monoclonal Antibody (Catalog # MAB6484) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PILR-α at approximately 30 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 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.** ● 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

Paired immunoglobulin-like type 2 receptor alpha (PILRa; also inhibitory receptor PILR-alpha) are 44-50 kDa paired receptors that consist of highly related activating and inhibitory receptors, and are widely involved in the regulation of the immune system. PILR-α is thought to act as a cellular signaling inhibitory receptor by recruiting cytoplasmic phosphatases like PTPN6/SHP-1 and PTPN11/SHP-2 via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules. Human PILR-α is synthesized as a 303 amino acid (aa) precursor that contains a 19 aa signal sequence, a 178 aa extracellular domain (ECD), a 21 aa transmembrane segment, and an 85 aa cytoplasmic domain. The ECD contains one Ig-like V-type domain and one potential site for N-linked glycosylation. The cytoplasmic domain contains two ITIM motifs (aa 267-272 and 296-301). Alternate splicing generates multiple shorter isoforms. One is TM and possesses a 35 aa substitution for aa 264-303, while others are soluble, and show a deletion of aa 152-224 that may be coupled to the 35 aa substitution noted above, or simply exhibit a 24 aa substitution for aa 152-303. Mature human PILR-α is 45% aa identical to mature mouse PILR-α. PILR-α is predominantly detected in hemopoietic tissues and is expressed in monocytes, macrophages, and granulocytes, but not lymphocytes. It is also strongly expressed by dendritic cells. PILR-α interacts with herpes simplex 1 glycoprotein B and functions as an entry coreceptor for this virus.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956