

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PTHLH/PTHrP in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 677939
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PTHLH/PTHrP Ala37-Arg175 Accession # P12272
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.

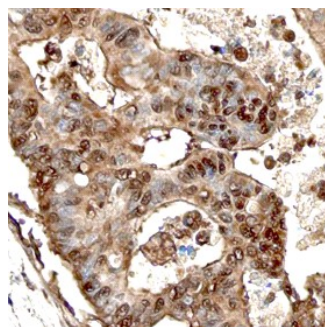
APPLICATIONS

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
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry



PTHLH/PTHrP in Human Colon.
PTHLH/PTHrP was detected in immersion fixed paraffin-embedded sections of human colon using Mouse Anti-Human PTHLH/PTHrP Monoclonal Antibody (Catalog # MAB6734) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm and nuclei of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

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. <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

The parathyroid hormone-like hormone (PTHLH), also known as PTHrP, has been recognized in patients suffering from tumors associated with the common neoplastic syndrome humoral hypercalcemia of malignancy (HHM). The 18 kDa protein is a 177 amino acid (aa) precursor that belongs to the parathyroid hormone family. It contains a 24 aa signal sequence followed by a 10 aa propeptide (aa 25-34). The mature chain runs from aa 37-177. Of note, residues 108-129 constitute a nuclear localization signal (NLS) providing evidence that the protein not only acts as a secreted factor, but in an intracrine manner as well. A second isoform is missing aa 176-177, and a 34 aa substitution for aa 176-177 produces a third isoform. There is a strong homology displayed between PTHLH and human parathyroid hormone (PTH) among the first 13 aa. Studies show that the similarity in this area is 67% at the aa and nucleotide levels. Indeed, eight of the first 13 aa of PTHLH and PTH are identical. Human PTHLH and mouse PTHLH share 86% aa sequence identity.