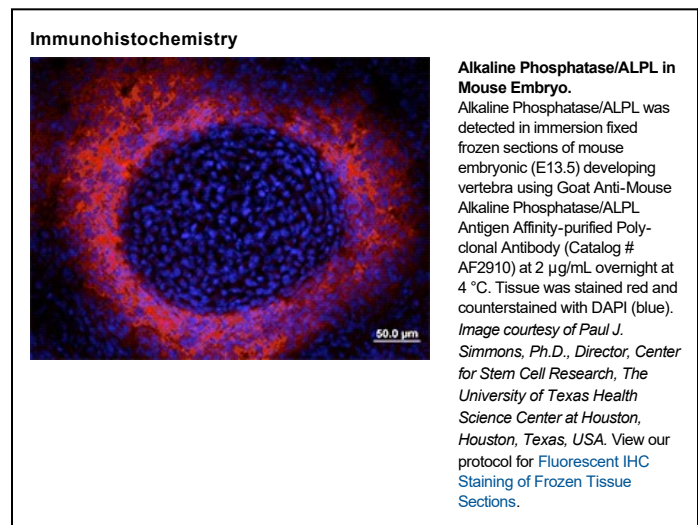
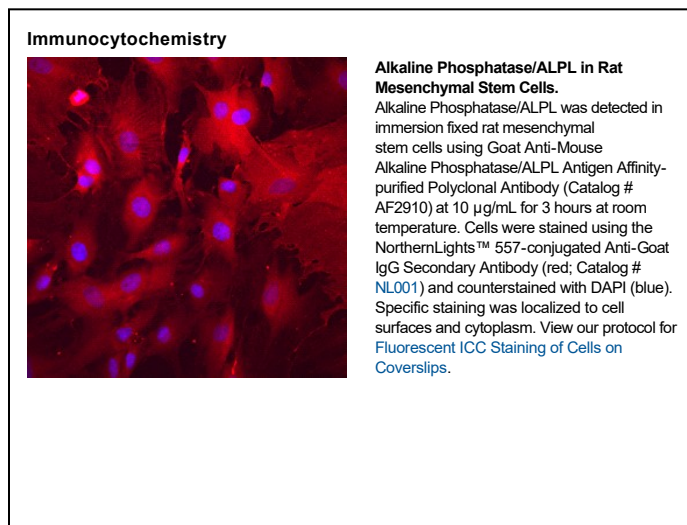
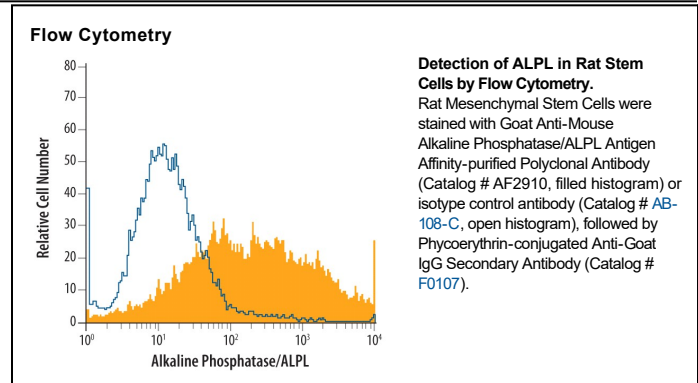
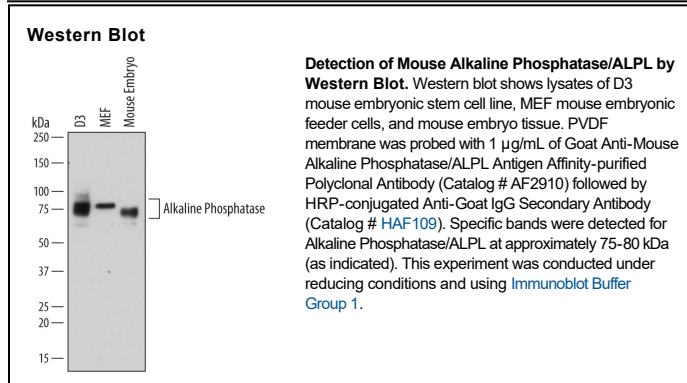


DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse Alkaline Phosphatase/ALPL in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 60% cross-reactivity with recombinant human ALPL is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Alkaline Phosphatase/ALPL Phe18-Gly503 Accession # P09242
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. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.	
	Recommended Concentration
	Sample
Western Blot	1 µg/mL See Below
Flow Cytometry	2.5 µg/10 ⁶ cells See Below
Immunocytochemistry	5-15 µg/mL See Below
Immunohistochemistry	5-15 µg/mL See Below
Immunoprecipitation	25 µg/mL Conditioned cell culture medium spiked with Recombinant Mouse Alkaline Phosphatase/ALPL (Catalog # 2910-AP), see our available Western blot detection antibodies
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

DATA



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

Several distinct genes encode alkaline phosphatases (APs) in mice with different tissue-specific expression patterns. The *Alpl* gene, also known as *Akp2*, encodes the liver/bone/kidney isozyme, also known as the tissue-nonspecific AP (TNAP) (1). The *Alpl* gene is a key regulator of bone mineralization in mice (2). A variety of mutations in the human ALPL gene leads to different forms of hypophosphatasia, characterized by poorly mineralized cartilage and bones (3). The native ALPL is a glycosylated homodimer attached to the membrane through a GPI-anchor. The C-terminal pro peptide (residues 504 to 524) is not present in the mature form.

References:

1. Terao, M. and B. Mintz (1987) Proc. Natl. Acad. Sci. USA **84**:7051.
2. Hessle, L. *et al.* (2002) Proc. Natl. Acad. Sci. USA **99**:9445.
3. Di Mauro, S. *et al.* (2002) J. Bone Miner. Res. **17**:1383.