

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TRACP in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 417603
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TRACP/PAP/ACP5 Ala22-Pro320 Accession # P13686
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Encoded by the ACP5 gene, Tartrate Resistant Acid Phosphatase (TRACP or TRAP) is also known as Purple Acid Phosphatase (PAP) or Acid Phosphatase 5 (ACP5) (1). The deduced amino acid (aa) sequence of human ACP5 predicts a signal peptide (aa 1-21) and a mature chain (aa 22-325). R&D Systems' recombinant human ACP5 consists of aa 22-320, without the last 5 residues, RRARP.

ACP5 is expressed at high levels by osteoclasts, macrophages and dendritic cells (2). Two forms, 5a and 5b, circulating in human blood, are derived from different cell types and have different functions. Derived from macrophages and dendritic cells, 5a is a marker of inflammatory conditions. Derived from osteoclasts, 5b is a marker of bone resorption. Compared to 5a, 5b does not contain sialic acid residues, has a higher specific activity and pH optimum, and may be processed into a disulfide-linked dimer (3).

PRODUCT SPECIFIC NOTICES

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