

Anti-osteosarcoma-associated cell membrane antigen [TP-1] Standard Size Ab01168-2.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

Isotype and Format: Mouse IgG2a, Fc Silent™, Kappa

Clone Number: TP-1

Alternative Name(s) of Target:

UniProt Accession Number of Target Protein:

Published Application(s): radioimmunodetection, IF, IHC

Published Species Reactivity: Dog, Human

Immunogen: This antibody was raised by immunising BALB/c mice with tumor cells from a human osteosarcoma, TPX, grown as a xenograft in athymic BALB/c nude mice.

Specificity: This osteosarcoma-specific antibody binds an epitope on a alkaline phosphatase isoform expressed on both canine and human osteosarcoma cells, but with very limited expression on normal cells and other cancer forms. It also reacts with some other major subtypes of human sarcomas.

Application Notes: In indirect immunofluorescence assays, this antibody has been shown to bind to the surface of human osteosarcoma TPX cells, but not to autologous skin fibroblasts, non-sarcomatous tumor cells or peripheral blood lymphocytes (Bruland et al, 1986). In IHC analysis, this antibody has been shown to bind to osteosarcomas, along with other major human sarcoma subtypes, including synovial sarcomas, malignant fibrous histiocytomas, malignant hemangiopericytomas and chondrosarcomas. It does not react with liposarcomas and leiomyosarcomas, or non-sarcomatous malignancies or normal tissue (Bruland et al, 1986). This binding profile matches that of MAb TP-3. A radiolabelled Fab derived from this antibody localises to human osteogenic sarcoma xenografts after intravenous injection (Bruland et al, 1987). In a pilot study, this antibody showed potential as an immunoscintigraphic agent for the early detection of lung metastases in patients with bone sarcoma (Bruland et al, 1994).

Antibody First Published in: Bruland et al. New monoclonal antibodies specific for human sarcomas. Int J Cancer. 1986 Jul 15;38(1):27-31. [PMID:3522438](#)

Note on publication: Describes the original generation of this antibody, and its characterisation.

Product Form

Size:

200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.