

TECHNICAL INSTRUCTIONS

Description	Clone	Species	Ig-isotype	Catalogue No.
Monoclonal antibody to mouse breast cancer resistance protein (Bcrp, Abcg2)	BXP-53	rat	IgG2a	SB- BXP-53-MAB

Specificity: The BXP-53 Mab was selected after immunization with a fusion protein containing the E. coli maltose binding protein and a fragment of the mouse Bcrp protein corresponding to amino acids 221-394. BXP-53 reacts with an internal epitope of bcrp, a 70 kD transmembrane half-transporter, which is involved in Multidrug resistance. BXP-53 also reacts with the human BCRP molecule.

Applications: Immunoblotting, Immunocytochemistry, Immunohistochemistry and Flow cytometry

Immunoblotting: use 1:20-50 dilution and HRP-anti-rat-IgG.

Immunocytochemistry: use 1:20-50 dilution on acetone fixed cytospin preparations.

Immunohistochemistry: BXP-53 (use 1:20) on acetone fixed frozen sections can be followed by incubation with biotin-labeled rabbit anti-rat IgG (1:100, DAKO) and HRP-labeled streptavidin (1: 500, DAKO).

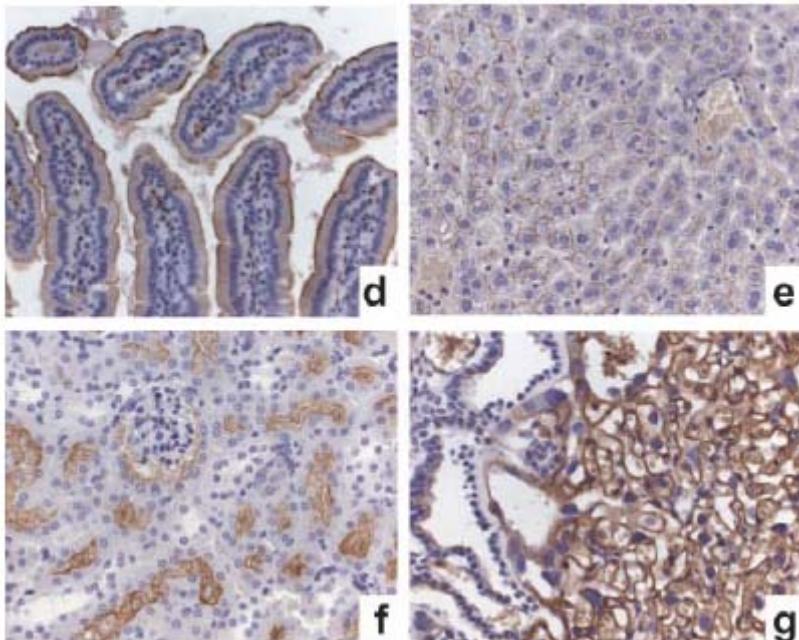


Figure 1. Immunohistochemical detection of Bcrp1 with BXP-53 in small intestine (d), liver (e), kidney (f), and placenta (g).

Flow cytometry: optimal conditions still to be defined.

Note: Optimal conditions must be determined individually for each application.



- Presentation:** 1 ml vials (>>200 tests) containing antibody in serumfree culture supernatant, with 0.7% BSA (Roche, Mannheim, Germany) and 0.1% Sodium azide. Concentration 250 µg immunoglobulin/ml (by ELISA)
- Shipping:** Ambient temperature.
- Storage:** Maintain refrigerated at 2-8°C for up to 6 months. For long-term storage prepare small aliquots and store at -20°C.
- References:**
1. JW Jonker, M Buitelaar, E Wagenaar, MA van der Valk, GL Scheffer, RJ Scheper, T Plösch, F Kuipers, RPJ Oude Elferink, H Rosing, J Beijnen, AH Schinkel. The breast cancer resistance protein protects against a major chlorophyll-derived dietary phototoxin and protoporphyria. PNAS in press 2002.
 2. Doyle LA, Yang WD, Abruzzo LV, Krogmann T, Gao YM, Rishi AK, and Ross DD. A multidrug resistance transporter from human MCF-7 breast cancer cells [erratum in PNAS USA 1999; 96(5):2569]. Proc Natl Acad Sci USA 95: 15665-15670, 1998.
 3. Scheffer GL, Maliepaard M, Pijnenborg ACLM, van Gastelen M A, de Jong MC, Schroeijers AB, van der Kolk DM, Allen JD, Ross DD, van der Valk P, Dalton WS, Schellens JHM and Scheper RJ. Breast Cancer Resistance Protein is localized at the plasma membrane in mitoxantrone and topotecan resistant cell lines. Cancer Res, 60: 2589-2593, 2000.

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LIMITATIONS: This is a laboratory reagent, not to be administered to humans or animals nor used for any drug purpose.

Safety information about the cell lines and culture media used in the production of the MAb.

MAb producing cells: The hybridoma cell line was obtained by fusion of lymph node cells from an immunized rat (Wistar) with SP2/O mouse myeloma cells.

Culture medium: IMDM (BioWhittaker), supplemented with Nutridoma-SP (Boehringer, Indianapolis, USA), without serum or added enzymes. Antibody containing supernatant has been concentrated and filtered through a 0.22 micron filter.

NOTE: this monoclonal antibody has been produced in a clinical laboratory in which no animal viruses are being studied or cultured.

