# More Than Antibodies DB BIOTE

## **RABBIT CLONAL** MONOSPECIFIC ANTIBODIES

### **FLOW CYTOMETRY** application

DB Biotech is focused on the design and production of high quality rabbit clonal antibodies developed by a novel and proprietary in vitro cloning technology which has been developed and perfected by the DB Biotech scientific team. Our unique technology enables the preparation of a pure immunoglobulin fraction corresponding to a single clone of B lymphocytes.

The obtained immunoglobulin recognizes only one single linear epitope on the antigen molecule, making a DB Biotech antibody comparable in quality to its monoclonal analogue. In addition, the influence of the protein tertiary structure frequently present in epitopes formed during production of monoclonal antibodies - is eliminated in the immunoglobulins corresponding to the clonal antibody.

DB Biotech produced antibodies correspond strictly to the conserved linear epitope of the antigen molecule, yielding a higher-quality, more specific antibody with significantly better affinity and avidity.

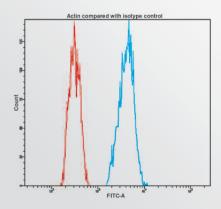
## **ADVANTAGES OF DB BIOTECH RABBIT CLONAL ANTIBODIES:**

- Exceptional specificity recognizing the corresponding antigen at the concentration of ≥ 5 ng
- FITC conjugated
- Highest sensitivity, affinity and avidity
- Fast and reliable protocols results within one hour
- Background free results
- Cost-effective dilutions
- SPECIAL FOCUS ON DIFFICULT TARGETS



ON THE MARKET

### **DB1000 IZOTYPE CONTROL AVAILABLE**



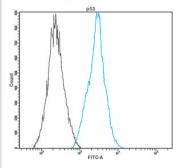
#### DB1000 FITC Anti-Rabbit IgG

Profile of peripheral blood lymphocytes analyzed by the BD FACSCanto II. Flow cytometric analysis of human lymphocytes, using Actin-FITC (blue; 10 µl per test) compared to Rabbit IgG-FITC isotype control (red).

#### DB1012 p53

Profile of human IMR32 cell line analyzed by the BD FACSCanto II.

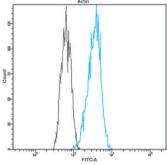
Cells were fixed, permeabilized and stained with anti-human p53 FITC (blue, used 10 µl per test) or with an isotype control (black).



#### DB1013 actin

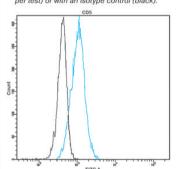
Profile of peripheral blood lymphocytes analyzed by the BD FACSCanto II.
Cells were fixed, permeabilized and stained with

anti-human Actin FITC (blue, used 10 µl per test) or with an isotype control (black).



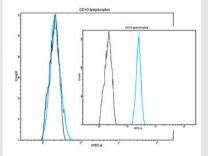
#### DB1017 CD5 FITC

Profile of peripheral blood lymphocytes analyzed by the BD FACSCanto II. Cells were fixed, permeabilized and stained with anti-human CD5 FITC (blue, used 10 µl per test) or with an isotype control (black).



#### **DB1018 CD10 FITC**

Profile of peripheral blood lymphocytes analyzed by the BD FACSCanto II Cells were fixed, permeabilized and stained with anti-human CD10 FITC (blue, used 10 µl per test) or with an isotype control (black).



Available in Canada from ...





## PRODUCT FORMAT – FOR FLOW CYTOMETRY APPLICATION

**FITC conjugated** 100 tests (1ml)

**Unconjugated** as special projects

#### FAQs:

## What is the difference between monoclonal and clonal antibodies?

Clonal antibodies are monospecific such as monoclonals. The principal difference between these two types of antibodies is that the clonal antibodies recognize solely very specifically selected linear epitope on the antigen molecule after its detailed proteomic analysis whereas the monoclonal antibodies recognize very often steric epitopes that frequently change their conformation during tissue preparation, protein extraction, etc., making the corresponding monoclonal antibody unspecific, less avid and in extreme cases not functional.

#### **PRODUCT LIST:**

Catalogue # of FITC conjugated	antibodies
Anti - Akt1 FITC	DB 1092
Anti - Akt1 (pSer473) FITC	DB 1093
Anti - Akt2 FITC	DB 1034
Anti - Akt2 (pSer478) FITC	DB 1035
Anti - Akt3 FITC	DB 1043
Anti - β-Actin FITC	DB 1013
Anti - Bax FITC	DB 1010
Anti - Bcl-2 FITC	DB 1011
Anti - B-raf, V600-E FITC	DB 1046
Anti - CD5 FITC	DB 1017
Anti - CD8 FITC	DB 1021
Anti - CD10 FITC	DB 1018
Anti - CD23 FITC	DB 1016
Anti - c-FOS FITC	DB 1045
Anti - CREB FITC	DB 1036
Anti - Cyclin D1 FITC	DB 1014
Anti - Erk 1,2 FITC	DB 1008
Anti - Estrogen Receptor FITC	DB 1015
Anti - Nephrin FITC	DB 1094
Anti - p38-α FITC	DB 1039
Anti - p38-β FITC	DB 1040
Anti - p38-γ FITC	DB 1041
Anti - p38-δ FITC	DB 1042
Anti - p40 FITC	DB 1059
Anti - p53 FITC	DB 1012
Anti - p60 FITC	DB 1061
Anti - PKC-α FITC	DB 1001
Anti - PKC-βI FITC	DB 1002
Anti - PKC-βII FITC	DB 1003
Anti - PKC-γ FITC	DB 1004
Anti - PKC-δ FITC	DB 1005
Anti - PKC-ε FITC	DB 1006
Anti - PKC-ζ FITC	DB 1007
Rabbit IgG FITC	DB 1000

#### Are clonal antibodies similar to immunoaffinity purified polyclonals?

No. Immunoaffinity purified polyclonal antibodies (whether the immunogen is the whole protein or selected peptide) are always represented by numerous fractions of immunoglobulins corresponding to all epitopes in the immunogenic sequence. Rabbit clonal monospecific antibody is a homogenous fraction of immunoglobulin (lgG) corresponding exclusively to one and only specifically defined epitope on the antigen molecule.

#### Why are clonal antibodies produced by original in vitro cloning technology exceptional?

Clonal antibodies are exceptional because they recognize their target (epitope) with the highest affinity, avidity and specificity that remains unchanged even after the important changes in conformation of the antigen – such as denaturation during the fixation of the tissue, protein transfer in the case of western blot-related procedures, or as a consequence of the protein-protein interactions.

#### **CUSTOM PRODUCTION SERVICES**

DB Biotech offers custom services and cooperation on special projects pertaining to the design and production of clonal antibodies against any protein or its modification whose name, detailed description of the modification or amino-acid sequences are supplied by the project contractor. We are proud to present our 90% project success rate in design of production of a new monospecific rabbit clonal antibody.



