Technology Offer

Ref.-No. M1510

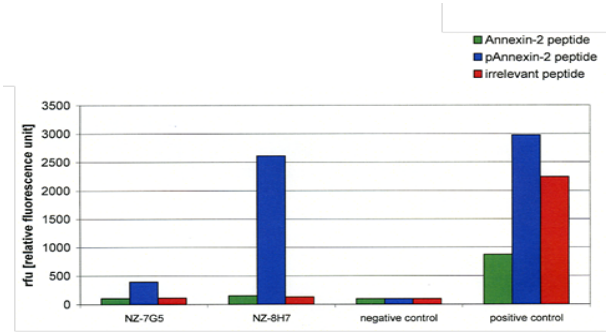
IMMUNOGLOBULIN OR FRAGMENT THEREOF FOR DETECTION OF TYROSINE-23 PHOSPHORYLATED ANNEXIN A2

Introduction

Annexin A2 generally acts in cellular differentiation and/or transformation and it has been shown to act in the context with many different diseases.
It is also known that annexin A2, and particularly its tyrosine-23 phosphorylated variation, plays a key role in crucial biological regulating processes. However, the detection of tyrosine-23 phosphorylated annexin A2, throughout the entire prior art, is characterized by a laborious process wherein at least two antibody detection steps are necessary.
There is a need to provide new, alternative means and methods that help to detect the tyrosine-23 phosphorylated annexin A2 variant.

Invention

The present invention relates to an immunoglobulin or fragment thereof capable of binding to tyrosine-23 phosphorylated annexin A2, an in vitro method for detection of a tyrosine-23 phosphorylated annexin A2 and the use of said immunoglobulin or fragment thereof in a diagnostic or therapeutic method. The present invention also relates to a method of production of an immunoglobulin or fragment thereof capable of binding to tyrosine-23 phosphorylated annexin A2 and a diagnostic composition comprising said immunoglobulin or fragment thereof. Also provided by the present invention is a kit comprising an immunoglobulin or fragment thereof capable of binding to tyrosine-23 phosphorylated annexin A2, a nucleic acid encoding for said immunoglobulin or fragment thereof, a vector comprising said nucleic acid, or a host transformed or transfected with said vector.



ELISA assay: Hybridoma supernatants were analyzed by ELISA on annexin A2 peptide, phosphorylated annexin-2 peptide and, as a control, irrelevant peptide. The specificity of the monoclonal antibody clone NZ-8H7-H5 could be clearly proven.

Advantages of the invention

The immunoglobulin or fragment thereof as described by the present invention is capable of specifically binding to tyrosine-23 phosphorylated annexin A2.

New aspects of the invention

The sequence of the identified monoclonal immunoglobulin, in particular the sequences of the VL and VH variable region, could be decoded, providing the specific amino acids residues responsible for binding of said immunoglobulin to tyrosine-23 phosphorylates annexin A2.

Patent situation

A priority establishing patent application has been filed.

For further information please contact:

Clinic Invent
Dr. Elke Benkhart
Landsberger Str. 98
D-80339 München
Tel. +49-(0)89/ 99 88 98 53
Fax +49-(0)89/ 99 88 98 54
E-Mail benkhart@uni-muenster.de