

MACROD1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57173

Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession Q9BQ69

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 35505
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human MACROD1

Epitope Specificity 101-200/325

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus.

SIMILARITY Contains 1 Macro domain.

SUBUNIT Interacts with ESR1; Interacts in a manner that is estrogen independent but is

enhanced by estrogen. Interacts (via macro domain) with AR.

DISEASENote=A chromosomal aberration involving MACROD1 is found in acute

leukemia. Translocation t(11;21)(q13;q22) that forms a RUNX1-MACROD1

fusion protein.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions Removes ADP-ribose from glutamate residues in proteins bearing a single

ADP-ribose moiety. Inactive towards proteins bearing poly-ADP-ribose. Deacetylates O-acetyl-ADP ribose, a signaling molecule generated by the deacetylation of acetylated lysine residues in histones and other proteins. Plays a role in estrogen signaling. Binds to androgen receptor (AR) and amplifies the transactivation function of AR in response to androgen. May

play an important role in carcinogenesis and/or progression of

hormone-dependent cancers by feed-forward mechanism that activates ESR1 transactivation. Could be an ESR1 coactivator, providing a positive feedback regulatory loop for ESR1 signal transduction. Could be involved in invasive growth by down-regulating CDH1 in endometrial cancer cells. Enhances

ESR1-mediated transcription activity.

Additional Information

Gene ID 28992

Other Names ADP-ribose glycohydrolase MACROD1, MACRO domain-containing protein 1,

O-acetyl-ADP-ribose deacetylase MACROD1, 3.1.1.106, Protein LRP16, [Protein

ADP-ribosylaspartate] hydrolase MACROD1, 3.2.2.-, [Protein

ADP-ribosylglutamate] hydrolase MACROD1, 3.2.2.-, MACROD1

{ECO:0000303|PubMed:23474712, ECO:0000312|HGNC:HGNC:29598}

IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Dilution

Name MACROD1 {ECO:0000303 | PubMed:23474712,

ECO:0000312 | HGNC:HGNC:29598}

Function Removes ADP-ribose from aspartate and glutamate residues in proteins

bearing a single ADP-ribose moiety (PubMed:23474712, PubMed:23474714). Inactive towards proteins bearing poly-ADP-ribose (PubMed:23474712, PubMed:23474714). Deacetylates O-acetyl-ADP ribose, a signaling molecule generated by the deacetylation of acetylated lysine residues in histones and other proteins (PubMed:21257746). Plays a role in estrogen signaling (PubMed:17893710, PubMed:17914104, PubMed:19403568). Binds to androgen receptor (AR) and amplifies the transactivation function of AR in response to androgen (PubMed:19022849). May play an important role in carcinogenesis and/or progression of hormone-dependent cancers by

feed-forward mechanism that activates ESR1 transactivation

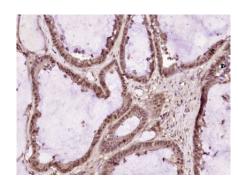
(PubMed:<u>17893710</u>, PubMed:<u>17914104</u>). Could be an ESR1 coactivator, providing a positive feedback regulatory loop for ESR1 signal transduction (PubMed:<u>17914104</u>). Could be involved in invasive growth by down-regulating

CDH1 in endometrial cancer cells (PubMed:<u>17893710</u>). Enhances ESR1-mediated transcription activity (PubMed:<u>17914104</u>).

Cellular Location Nucleus. Note=Recruited to DNA lesions, probably via mono-APD-ribosylated

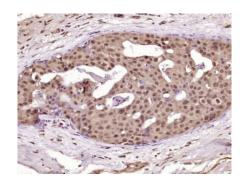
proteins.

Images



Paraformaldehyde-fixed, paraffin embedded (Human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MACROD1) Polyclonal Antibody, Unconjugated (AP57173) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Paraformaldehyde-fixed, paraffin embedded (Human breast carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MACROD1) Polyclonal



Antibody, Unconjugated (AP57173) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.