

# MXRA5 (D-20): sc-248018

## BACKGROUND

Matrix-remodeling-associated protein 5 (MXRA5), also known as adhesion protein with leucine-rich repeats and immunoglobulin domains related to perlecan (Adlican), is a 2,828 amino acid secretory protein. Containing 12 Ig-like C2-type domains and 7 LRR repeats, MXRA5 is a member of the leucine-rich repeat and Ig domain-containing (LRRIG) family of proteins. MXRA5 expression, while decreasing with age from youth until late adulthood, increases from late adulthood through late elderhood. Most notably, MXRA5 has been shown to be overexpressed in centenarians. This expression pattern suggests a role of MXRA5 in the biology of aging and longevity.

## REFERENCES

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2. Perls, T. 2002. Genetic and environmental influences on exceptional longevity and the AGE nomogram. *Ann. N.Y. Acad. Sci.* 959: 1-13.
3. Perls, T., et al. 2002. The genetics of exceptional human longevity. *J. Mol. Neurosci.* 19: 233-238.
4. Zou, T.T., et al. 2002. Application of cDNA microarrays to generate a molecular taxonomy capable of distinguishing between colon cancer and normal colon. *Oncogene* 21: 4855-4862.
5. Perls, T., et al. 2003. Understanding the determinants of exceptional longevity. *Ann. Intern. Med.* 139: 445-449.
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7. Chondrogianni, N., et al. 2004. Cloning of differentially expressed genes in skin fibroblasts from centenarians. *Biogerontology* 5: 401-409.
8. Gabrielsen, A., et al. 2007. Gene expression signals involved in ischemic injury, extracellular matrix composition and fibrosis defined by global mRNA profiling of the human left ventricular myocardium. *J. Mol. Cell. Cardiol.* 42: 870-883.
9. Homma, S., et al. 2009. Expression pattern of LRR and Ig domain-containing protein (LRRIG protein) in the early mouse embryo. *Gene Expr. Patterns* 9: 1-26.

## CHROMOSOMAL LOCATION

Genetic locus: MXRA5 (human) mapping to Xp22.33.

## SOURCE

MXRA5 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MXRA5 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-248018 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MXRA5 (D-20) is recommended for detection of MXRA5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with MXRA7 or MXRA8.

MXRA5 (D-20) is also recommended for detection of MXRA5 in additional species, including equine and canine.

Suitable for use as control antibody for MXRA5 siRNA (h): sc-91219, MXRA5 shRNA Plasmid (h): sc-91219-SH and MXRA5 shRNA (h) Lentiviral Particles: sc-91219-V.

Molecular Weight of MXRA5: 312 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.