# **MNDA**

| CONTACT INFORMATION:<br>STATUS: | Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas Validated |
|---------------------------------|--|
| TYPE:                           | mouse anti human   |
| CLONE NAME:                     | 253A   |
| PROTEIN:                        | Human full length MNDA   |
| PROTEIN WEB:                    | http://www.ncbi.nlm.nih.gov/omim/159553  |
| ANTIGEN USED:                   | MNDA-GST-HIS recombinant protein   |
| FUSION PARTNER:                 | splenocytes & myeloma p3-NS1/Ag4-1 (NS1) cells                                       |
| ISOTYPE:                        | lgG1   |
| SPECIES REACTIVITY:             | Human  |
| PREPARATION AND STORAGE:        | Aliquot and store at 4°C. Do not freeze.   |
| APP RECOMMENDED:                | IHQ-paraffin, IF, WB   |
| APP NO RECOMMENDED:             | IHQ-frozen   |
| APP NO TESTED:                  | Flow cytometry, IP   |
|                                 |  |

## DESCRIPTION

MNDA (myeloid cell nuclear differentiation antigen) is a 55kDa nuclear protein constitutively expressed in myelomonocytic leukemia cells, myelomonocytic cell lines, and normal peripheral blood granulocytes and monocytes. A low level of expression has also been found in a population of mantle B lymphocytes but no expression exists in germinal centre cells or plasma cells.

## PUBLICATION DESCRIBING ANTIBODY CHARACTERIZATION/VALIDATION

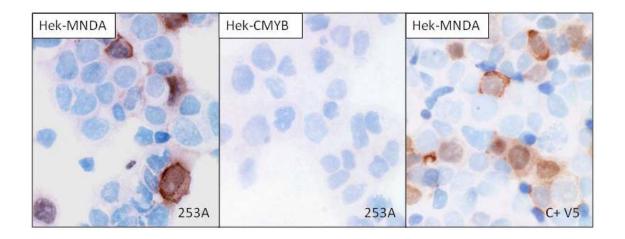
Kanellis G, Roncador G, Arribas A, Mollejo M, Montes-Moreno S, Maestre L, Campos-Martin Y, Ríos Gonzalez JL, Martinez-Torrecuadrada JL, Sanchez-Verde L, Pajares R, Cigudosa JC, Martin MC, Piris MA (2009). Identification of MNDA as a new marker for nodal marginal zone lymphoma. Leukemia 23(10):1847-57.http://www.ncbi.nlm.nih.gov/pubmed/19474799

#### REFERENCES

Kanellis G, Roncador G, Arribas A, Mollejo M, Montes-Moreno S, Maestre L, Campos-Martin Y, Ríos Gonzalez JL, Martinez-Torrecuadrada JL, Sanchez-Verde L, Pajares R, Cigudosa JC, Martin MC, Piris MA (2009). Identification of MNDA as a new marker for nodal marginal zone lymphoma. Leukemia 23(10):1847-57.

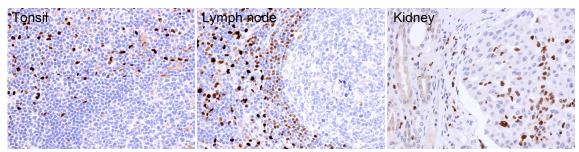
# APPLICATIONS

| IHC Techniques              | Clone | Dilution | Antibody concentration | Antigen retrieval method | Visualization kit              | Positive control | Negative control | Protein localization | Positivity in other species |
|-----------------------------|-------|----------|------------------------|--------------------------|--------------------------------|------------------|------------------|----------------------|-----------------------------|
| Frozen tissue and cytospins |       |          |                        |                          |                                |                  |                  |                      |                             |
| Recommended                 | 253A  | neat     | supernatant            | 1                        | goat anti<br>mouse HRP<br>DAKO | tonsil           |                  | nuclear              |                             |
| Paraffin tissue             |       |          |                        |                          |                                |                  |                  |                      |                             |
| Recommended                 | 253A  | neat     | supernatant            | ER2 (Tris-EDTA) 15 min   | Novolink                       | tonsl            |                  | nuclear              |                             |
| Immunofluorescence          |       |          |                        |                          |                                |                  |                  |                      |                             |
| Recommended                 | 253A  | neat     | supernatant            |                          |                                | tonsil           |                  | nuclear              |                             |



#### MNDA antibody (253A) in transfected cells.

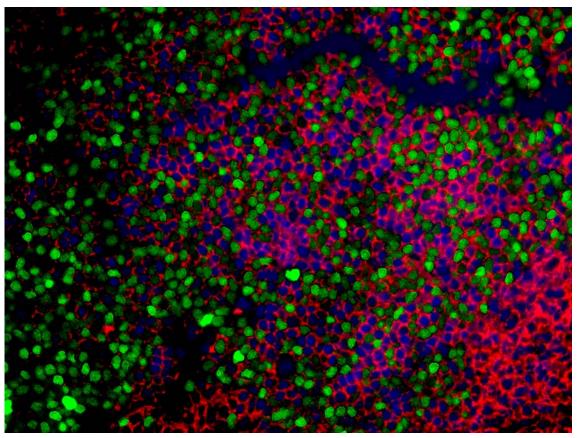
Validation of MNDA (253A) monoclonal antibody in HEK-V5-MNDA transfected cells. HEK-CMYB transfected cells was used as negative control. Anti-V5 monoclonal antibody was used as positive control.



#### MNDA (253A) immunohistochemistry in human paraffin sections.

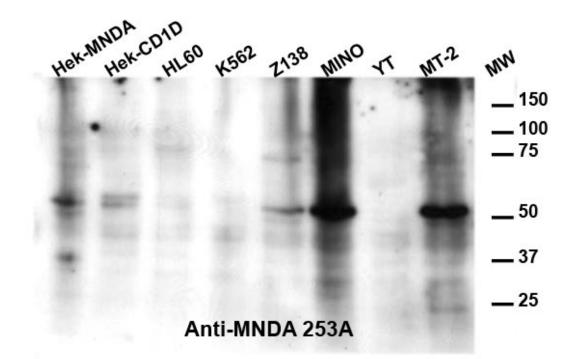
MNDA protein is detected in the nucleus of mature granulocyte and

monocyte cells. MNDA ia also expressed, although with less intensity, by cells occupying the marginal zone surrounding the germinal centers (GCs) in normal tonsil. The GCs of all follicles are negative for MNDA. Reactive monocytoid B cells and plasma cells do not express MNDA



**MNDA (253A) immunofluorescence in human paraffin tonsil.** MNDA (253A) nuclear protein in green, CD20 membrene staining in red and DAPI in blue.

| WB Techniques       | Clone | Dilution | Antibody concentration | Positive control | Negative control | Expected MW | Observed Mw | Positivity in other species |
|---------------------|-------|----------|------------------------|------------------|------------------|-------------|-------------|-----------------------------|
| Western Blotting    |       |          |                        |                  |                  |             |             |                             |
| Recommended         | 253A  | neat     | supernatant            | Mino cell line   | YT cell line     | 55kDa       | 48kDa       |                             |
| Immunoprecipitation |       |          |                        |                  |                  |             |             |                             |



Western Blotting of MNDA (253A) using different lymphoma cell lines and transfected cells.

Lane 1 Hek-MNDA (10ug) (+)

Lane 2 Hek-CD1D (10ug) (-)

Lane 3 HL60 (100ug) (-)

Lane 4 K562 (100ug) (-)

Lane 5 Z138 (100ug) (+)

Lane 6 Mino (100ug) (+)

Lane 7 YT (100ug) (-)

Lane 8 MT-2 (100ug) (+)