

GAPDH

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	mouse monoclonal
CLONE NAME:	FF26A
PROTEIN:	Glyceraldehyde-3-phosphate dehydrogenase
PROTEIN WEB:	https://www.uniprot.org/uniprot/P04406
ANTIGEN USED:	human CD4+ lymphocytes
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG1
SPECIES REACTIVITY:	human
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze
COMMERCIALIZED BY:	Biologend and eBioscience

DESCRIPTION

Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. Nuclear functions are probably due to the nitrosylase activity that mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2 and PRKDC. Modulates the organization and assembly of the cytoskeleton. Facilitates the CHP1-dependent microtubule and membrane associations through its ability to stimulate the binding of CHP1 to microtubules.

REFERENCES

Ong SM, Hadadi E, Dang TM, Yeap WH, Tan CT, Ng TP, Larbi A, Wong SC. The pro-inflammatory phenotype of the human non-classical monocyte subset is attributed to senescence. *Cell Death Dis.* 2018 Feb 15;9(3):266.

Dragoj M, Bankovic J, Sereti E, Stojanov SJ, Dimas K, Pesic M, Stankovic T. Anti-invasive effects of CXCR4 and FAK inhibitors in non-small cell lung carcinomas with mutually inactivated p53 and PTEN tumor suppressors. *Invest New Drugs.* 2017 Dec;35(6):718-732.

Ruehle S, Wager-Miller J, Straiker A, Farnsworth J, Murphy MN, Loch S, Monory K, Mackie K, Lutz B. Discovery and characterization of two novel CB1 receptor splice variants with modified N-termini in mouse. *J Neurochem*. 2017 Aug;142(4):521-533.

Liu CC, Leclair P, Monajemi M, Sly LM, Reid GS, Lim CJ. α -Integrin expression and function modulates presentation of cell surface calreticulin. *Cell Death Dis*. 2016 Jun 16;7:e2268.

DiFranco KM, Johnson-Farley N, Bertino JR, Elson D, Vega BA, Belinka BA Jr, Kachlany SC. LFA-1-targeting Leukotoxin (LtxA; Leukothera®) causes lymphoma tumor regression in a humanized mouse model and requires caspase-8 and Fas to kill malignant lymphocytes. *Leuk Res*. 2015 Jun;39(6):649-56. doi: 10.1016/j.leukres.2015.03.010. Epub 2015 Mar 21.

Butin-Israeli V, Adam SA, Jain N, Otte GL, Neems D, Wiesmüller L, Berger SL, Goldman RD. Role of lamin b1 in chromatin instability. *Mol Cell Biol*. 2015 Mar;35(5):884-98.

Trifari S, Pipkin ME, Bandukwala HS, Äijö T, Bassein J, Chen R, Martinez GJ, Rao A. MicroRNA-directed program of cytotoxic CD8+ T-cell differentiation. *Proceedings of the National Academy of Sciences of the United States of America* on 12 November 2013.

Liu CC, Leclair P, Yap SQ, Lim CJ. The Membrane-Proximal KXGFFKR Motif of α -Integrin Mediates Chemoresistance. *Molecular and Cellular Biology* on 1 November 2013.

Chen CY, Jan YH, Juan YH, Yang CJ, Huang MS, Yu CJ, Yang PC, Hsiao M, Hsu TL, Wong CH. Fucosyltransferase 8 as a functional regulator of nonsmall cell lung cancer. *Proceedings of the National Academy of Sciences of the United States of America* on 8 January 2013.

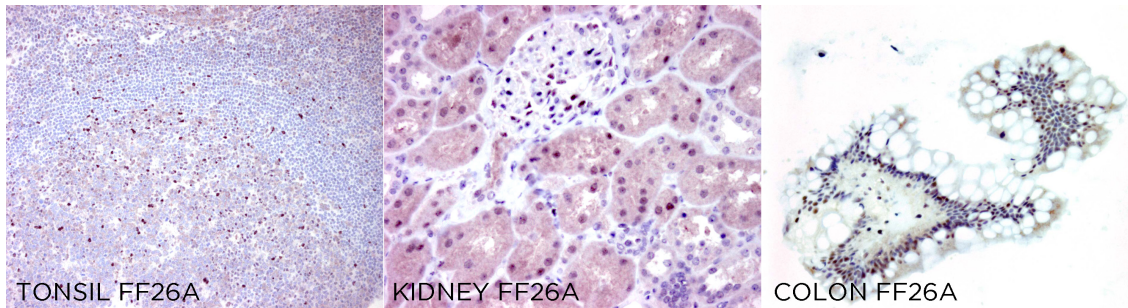
Zou L, Cao S, Kang N, Huebert RC, Shah VH. Fibronectin induces endothelial cell migration through α 1 integrin and Src-dependent phosphorylation of fibroblast growth factor receptor-1 at tyrosines 653/654 and 766. *The Journal of Biological Chemistry* on 2 March 2012.

Maestre L, Tooze R, Cañamero M, Montes-Moreno S, Ramos R, Doody G, Boll M, Barrans S, Baena S, Piris MA, Roncador G. XBP1(S) provides a specific marker of stress response and plasma cell differentiation. *Haematologica* 2009 Mar; 94(3):419-22. Epub 2009 Jan 27.

Aparicio T, Guillou E, Coloma J, Montoya G and Méndez J. The GINS complex interacts with Cdc45 and MCM proteins and is essential for S phase progression in human cells. *Nucleic Acids Res.* 2009 Apr;37(7):2087-95. Epub 2009 Feb 17.

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 cytopspins									
Paraffin tissue									
Recommended	FF26A	1:2	supernatant			Tonsil		nuclear	
Immunofluorescence									



TONSIL FF26A

KIDNEY FF26A

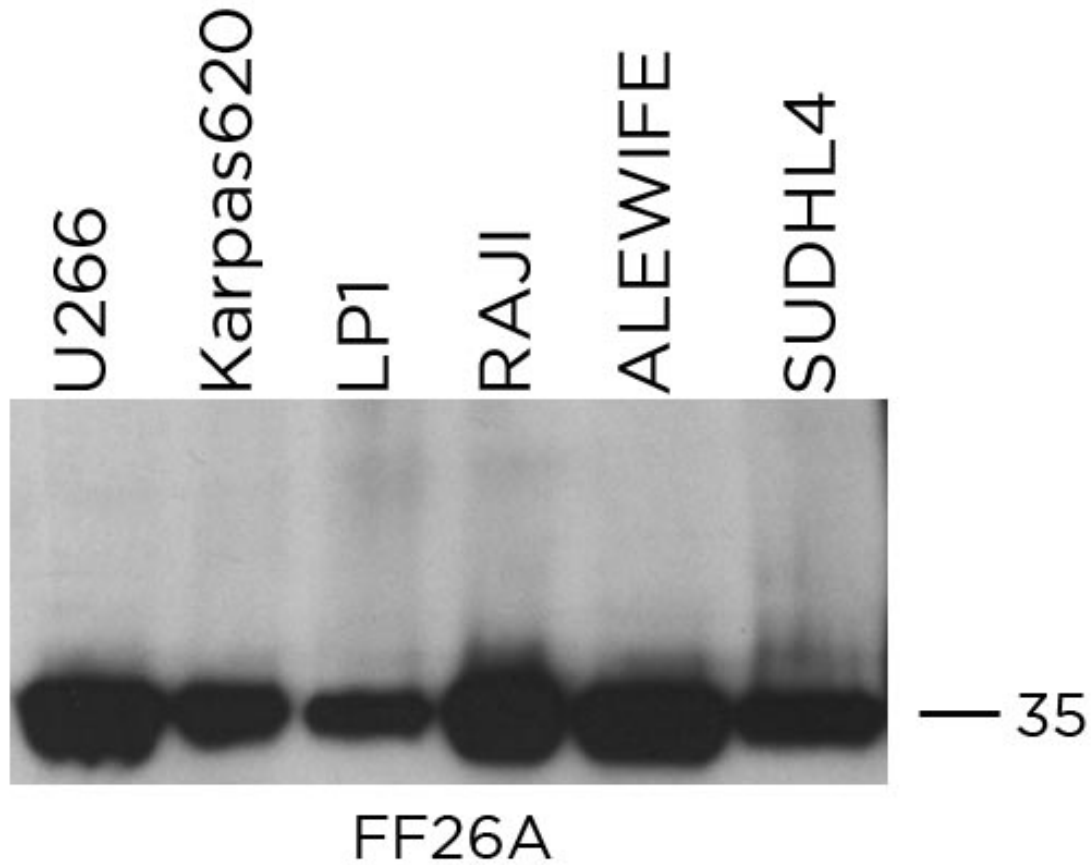
COLON FF26A

FF26A mAb is able to detect GAPDH protein in human paraffin tissues

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								

Recommended	FF26A	Neat	supernatant			36kDa	36kDa	
-------------	-------	------	-------------	--	--	-------	-------	--

Immunoprecipitation



FF26A mAb is able to detect human and mouse GAPDH protein by WB.

LANES

Lane 1 U266 cell line (100ug) (+)

Lane 2 Karpas620 cell line (100ug) (+)

Lane 3 LP1 cell line (100ug) (+)

Lane 4 RAJI cell line (100ug) (+)

Lane 5 ALEWIFE cell line (100ug) (+)

Lane 6 SUDHL4 cell line (100ug) (+)