

AUTOANTICORPS ANTI - NUCLEAIRES ET CANCER

CELLULES PROLIFERATIVES

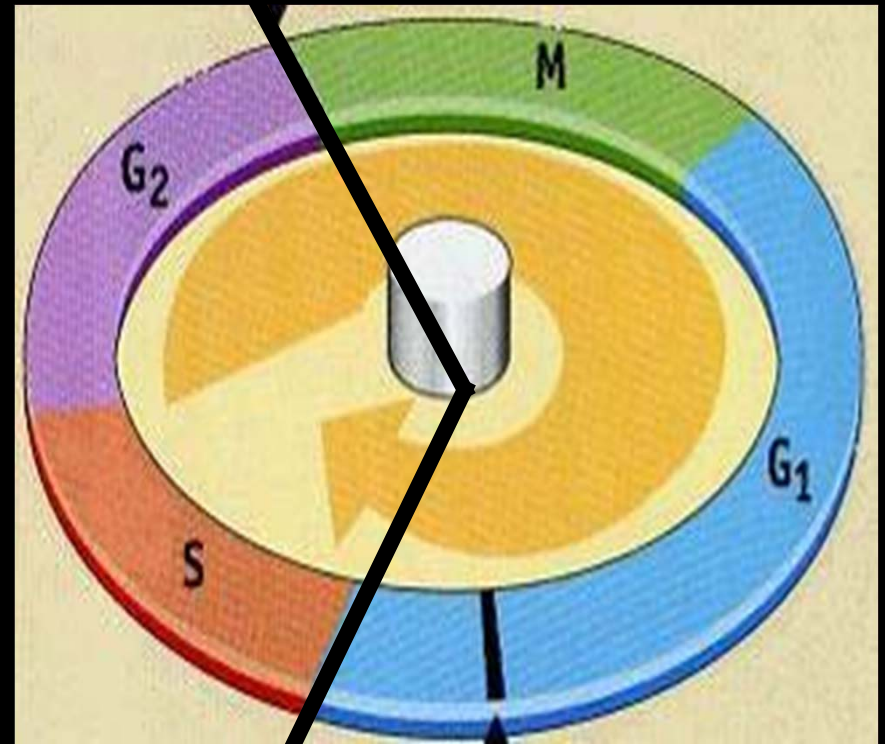
CELLULES MITOTIQUES

ANTICORPS ANTI - CELLULES PROLIFERATIVES

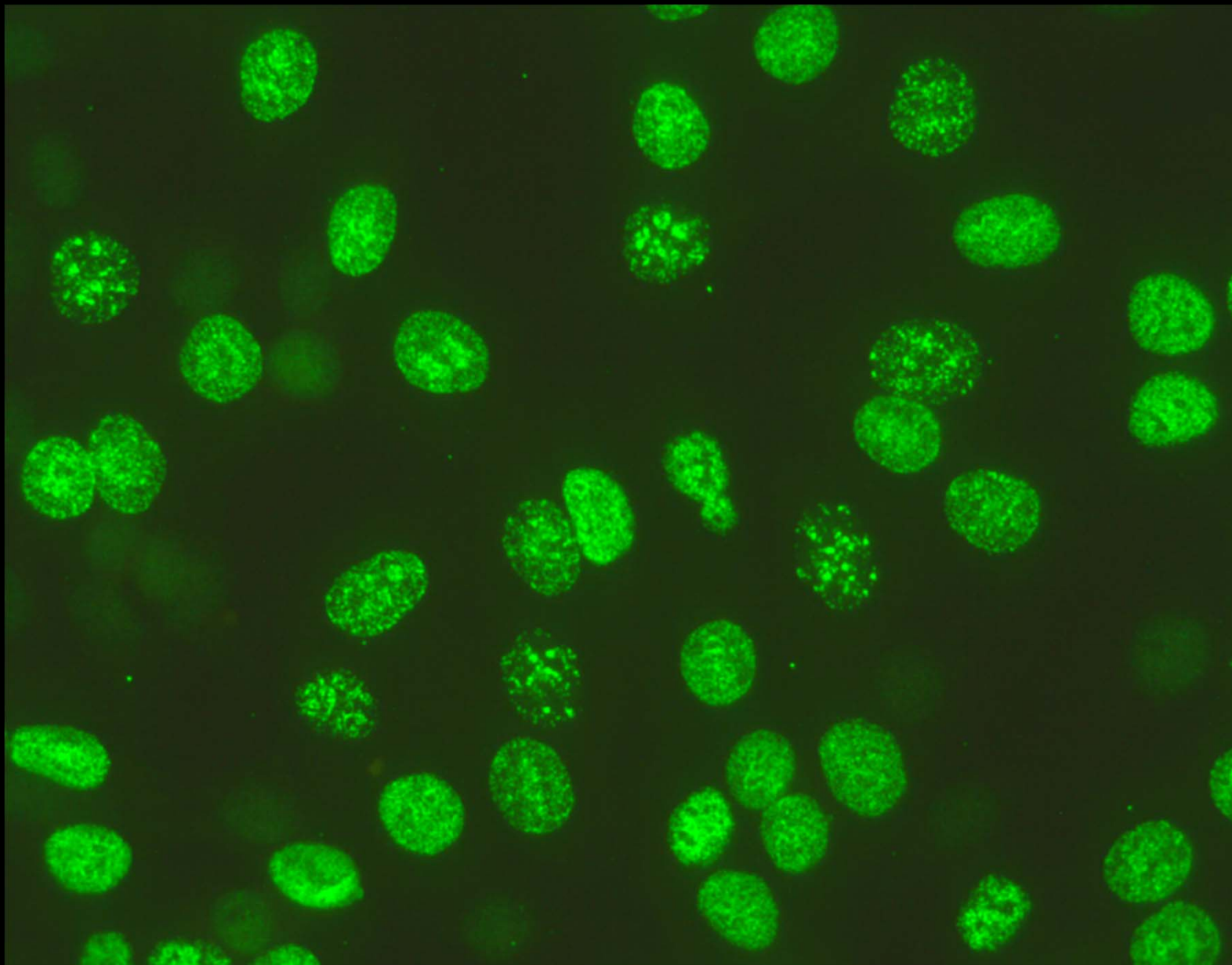
**PCNA : Activateur de l'ADN
Polymérase**

PSEUDO-PCNA 1 : STRIATINE 3

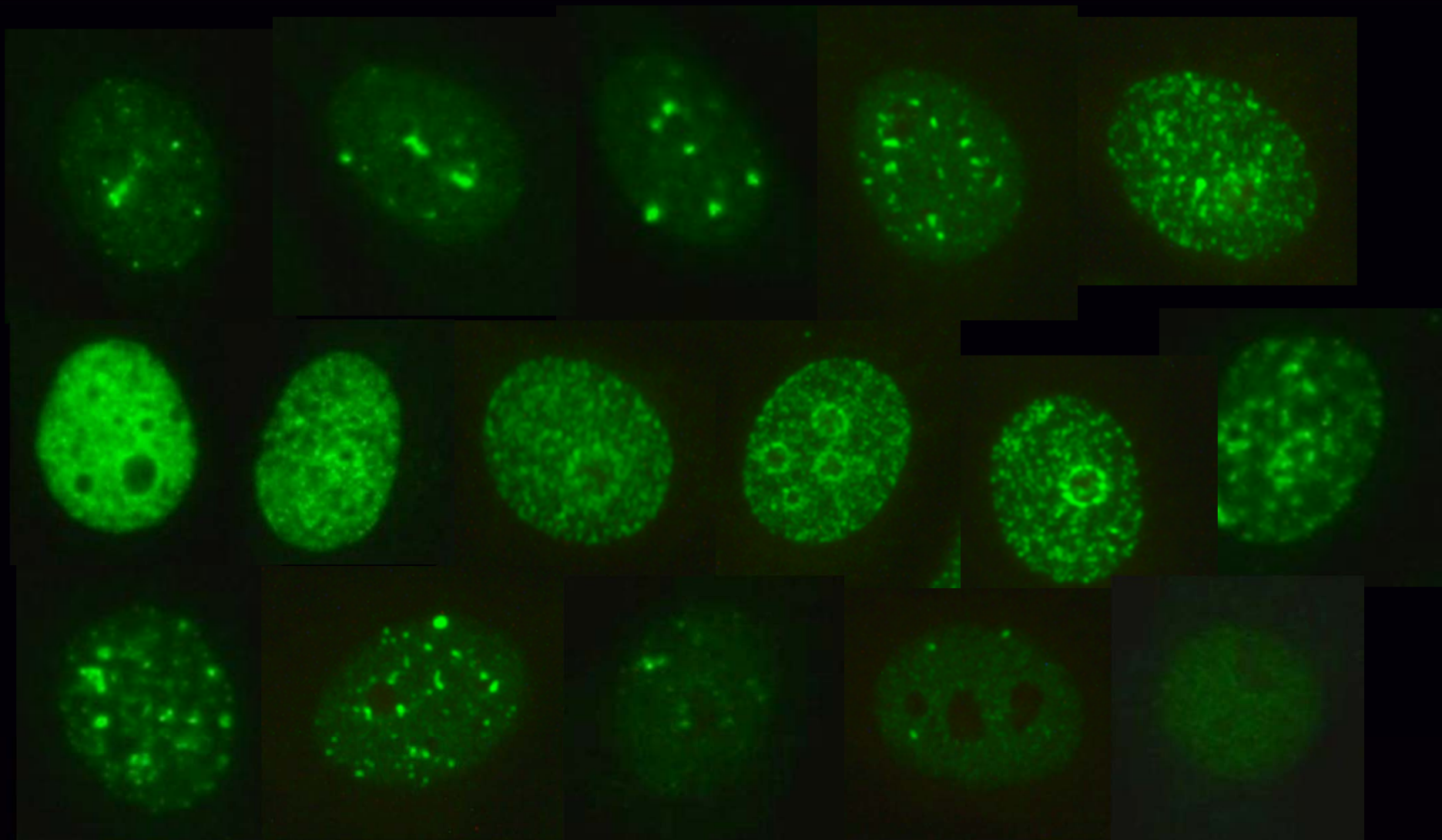
PSEUDO-PCNA 2 : Nop52



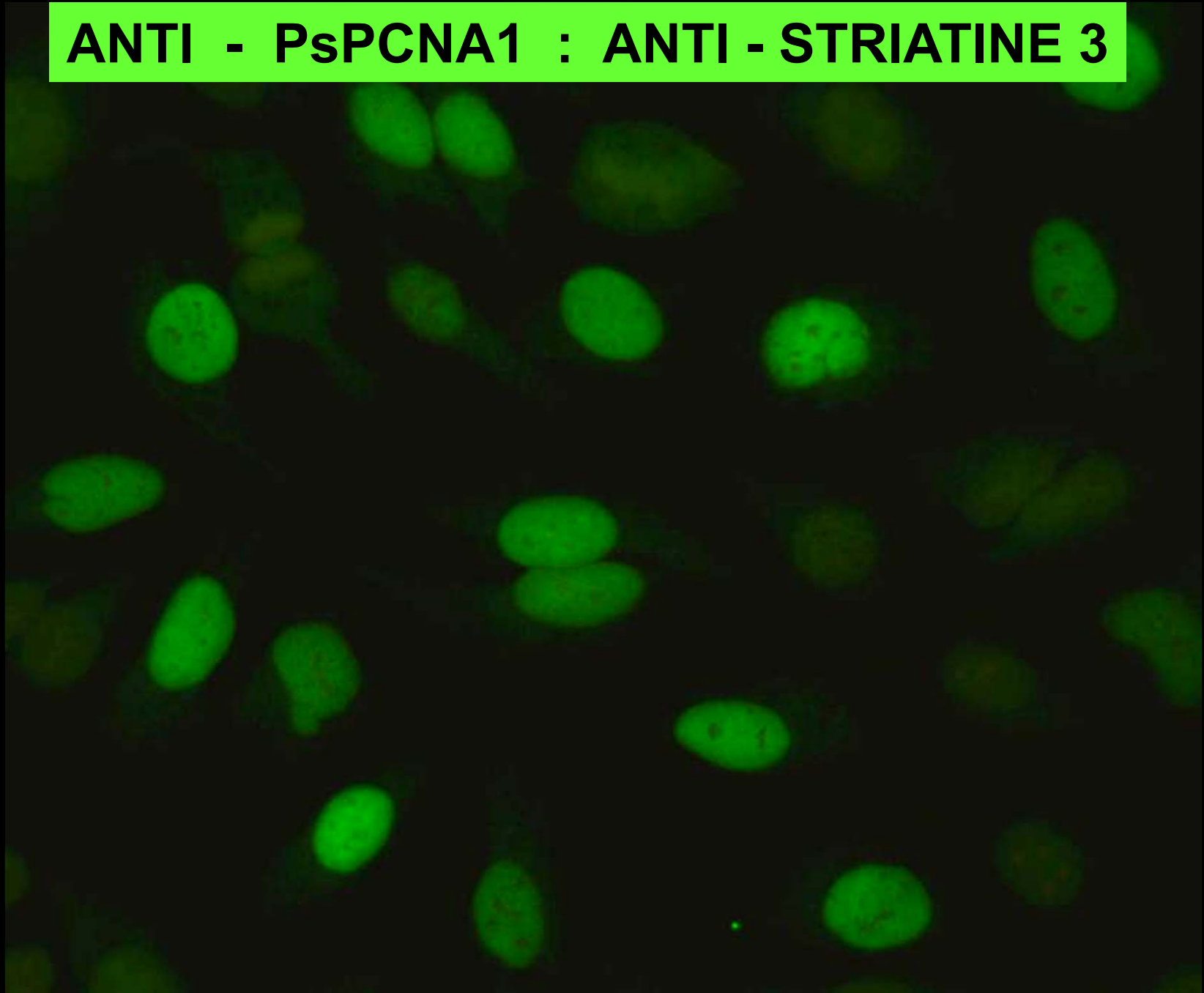
ANTICORPS ANTI - PCNA



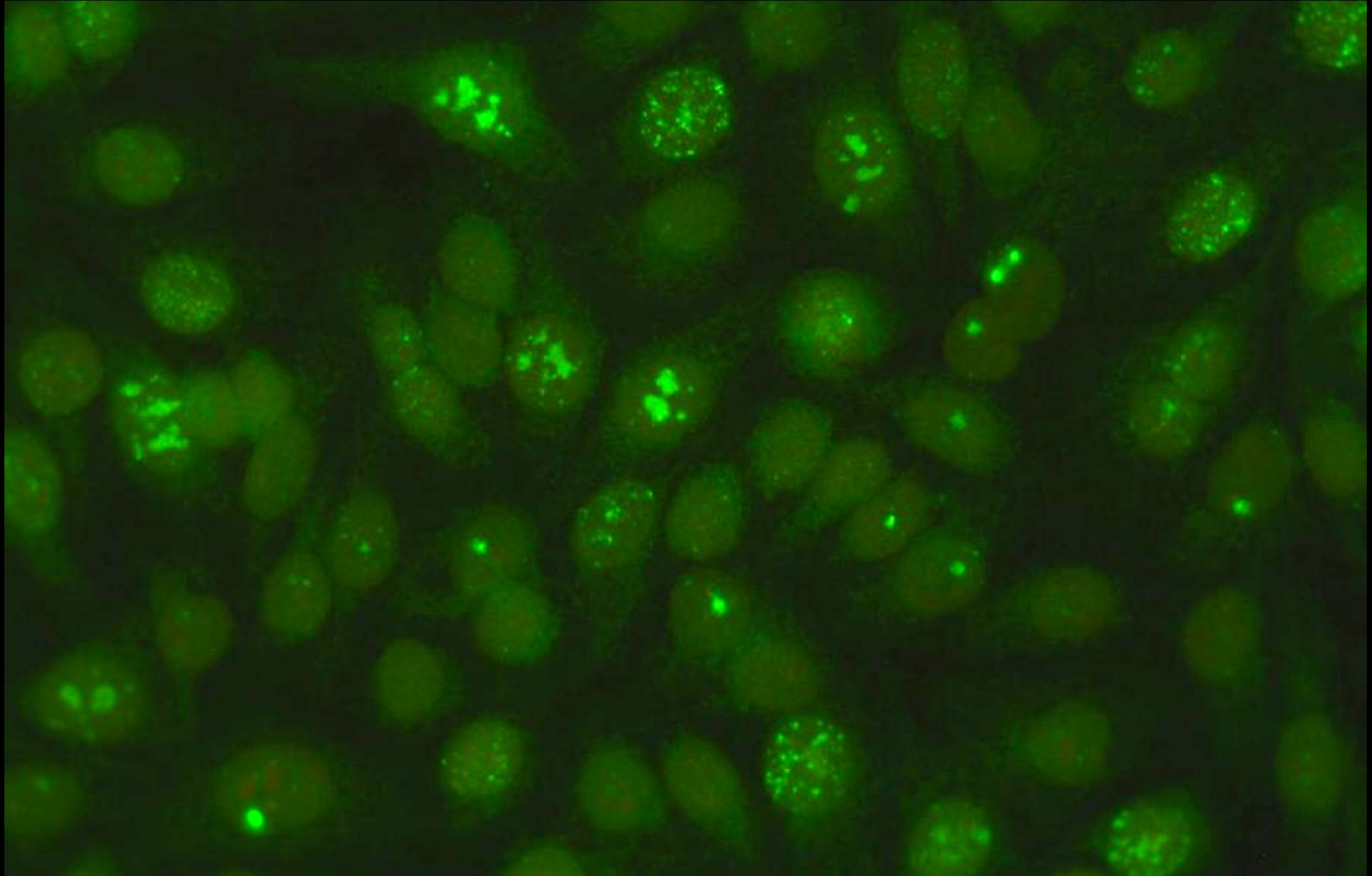
ANTICORPS ANTI - PCNA

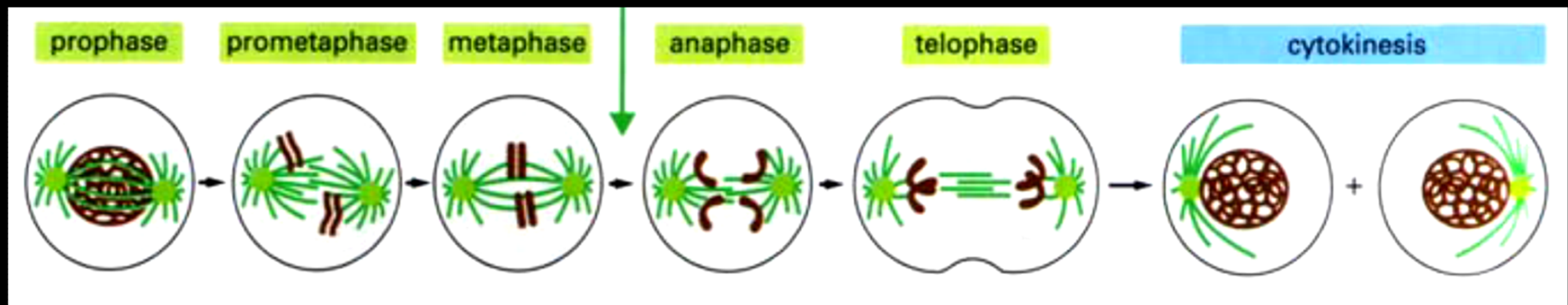


ANTI - PsPCNA1 : ANTI - STRIATINE 3



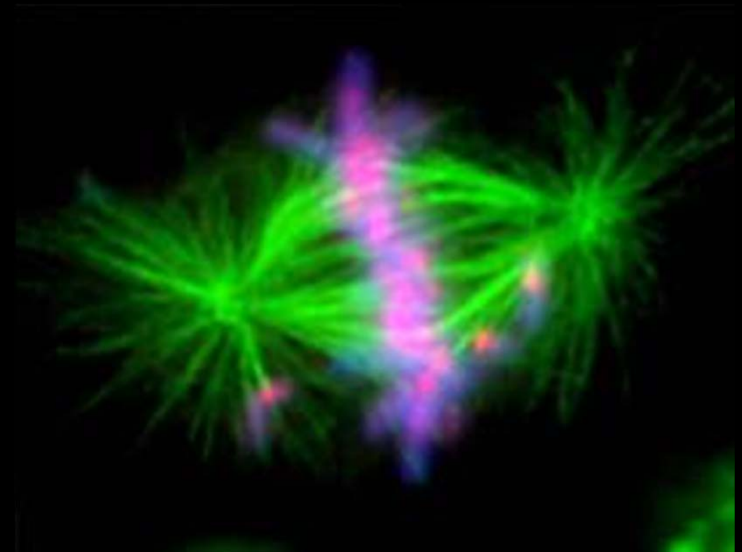
ANTI - PsPCNA2 : ANTI – Nop52



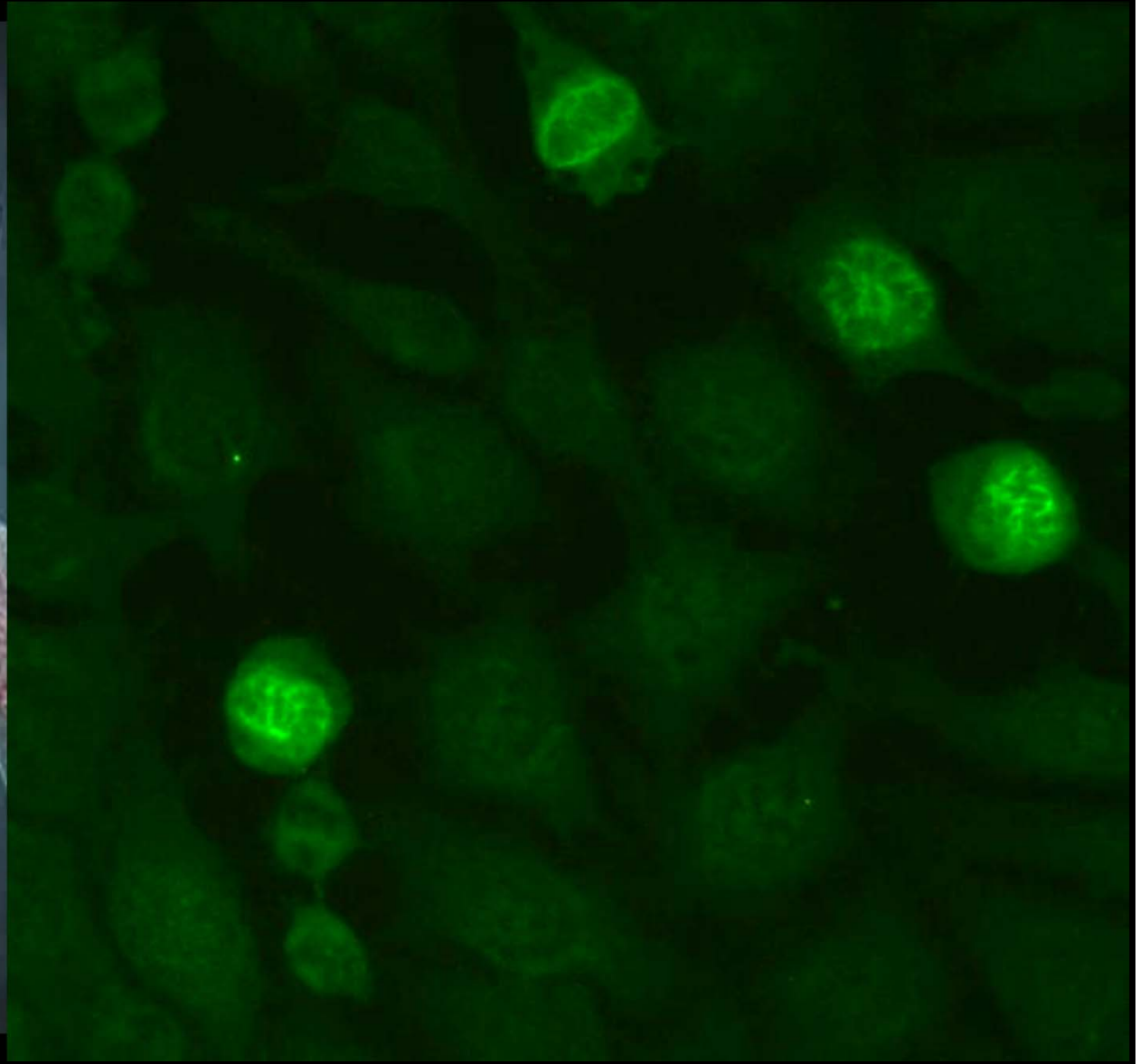
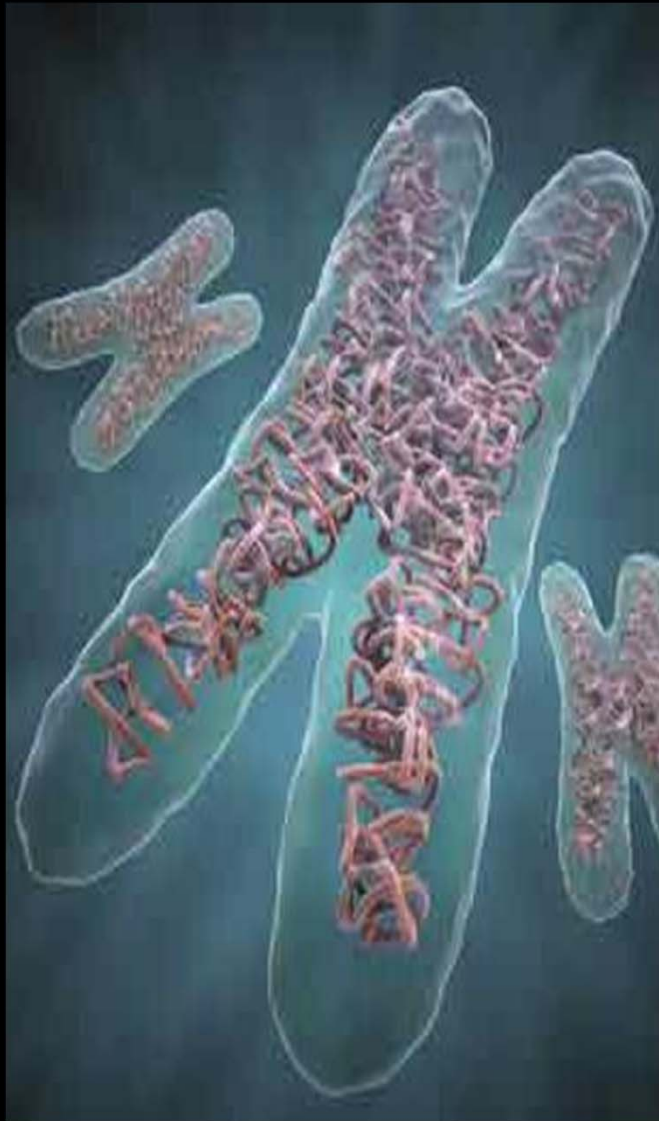


CHROMOSOME

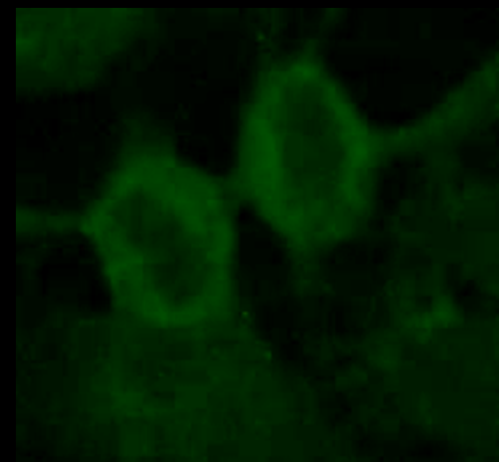
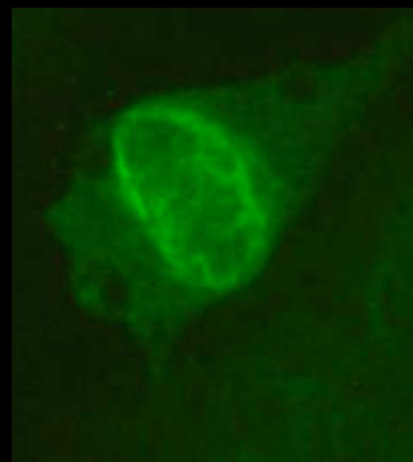
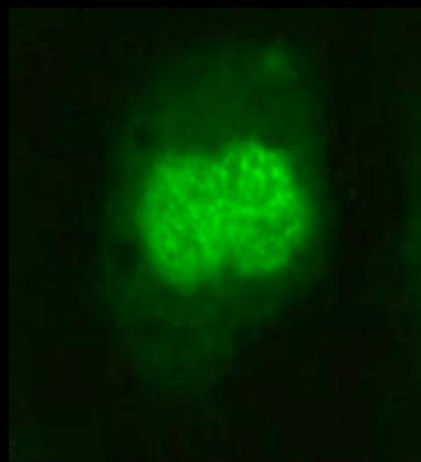
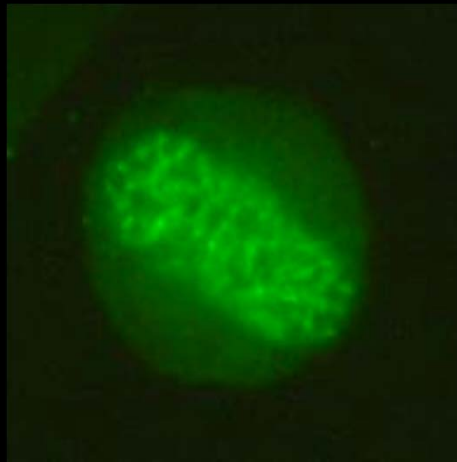
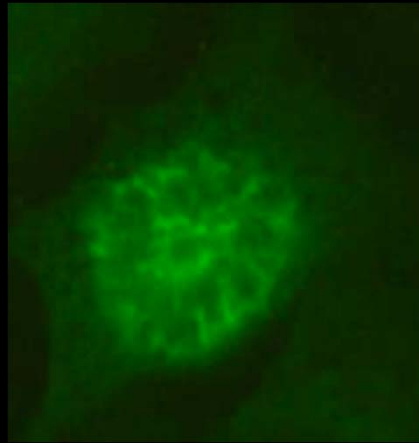
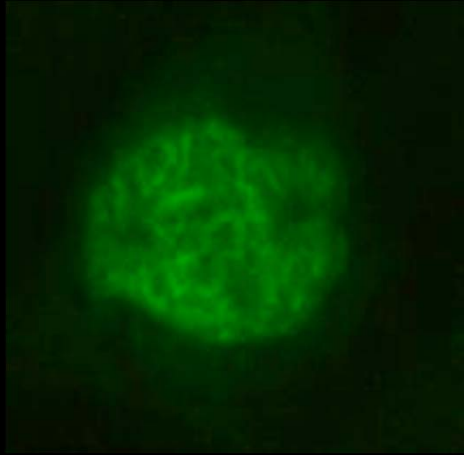
FUSEAU MITOTIQUE



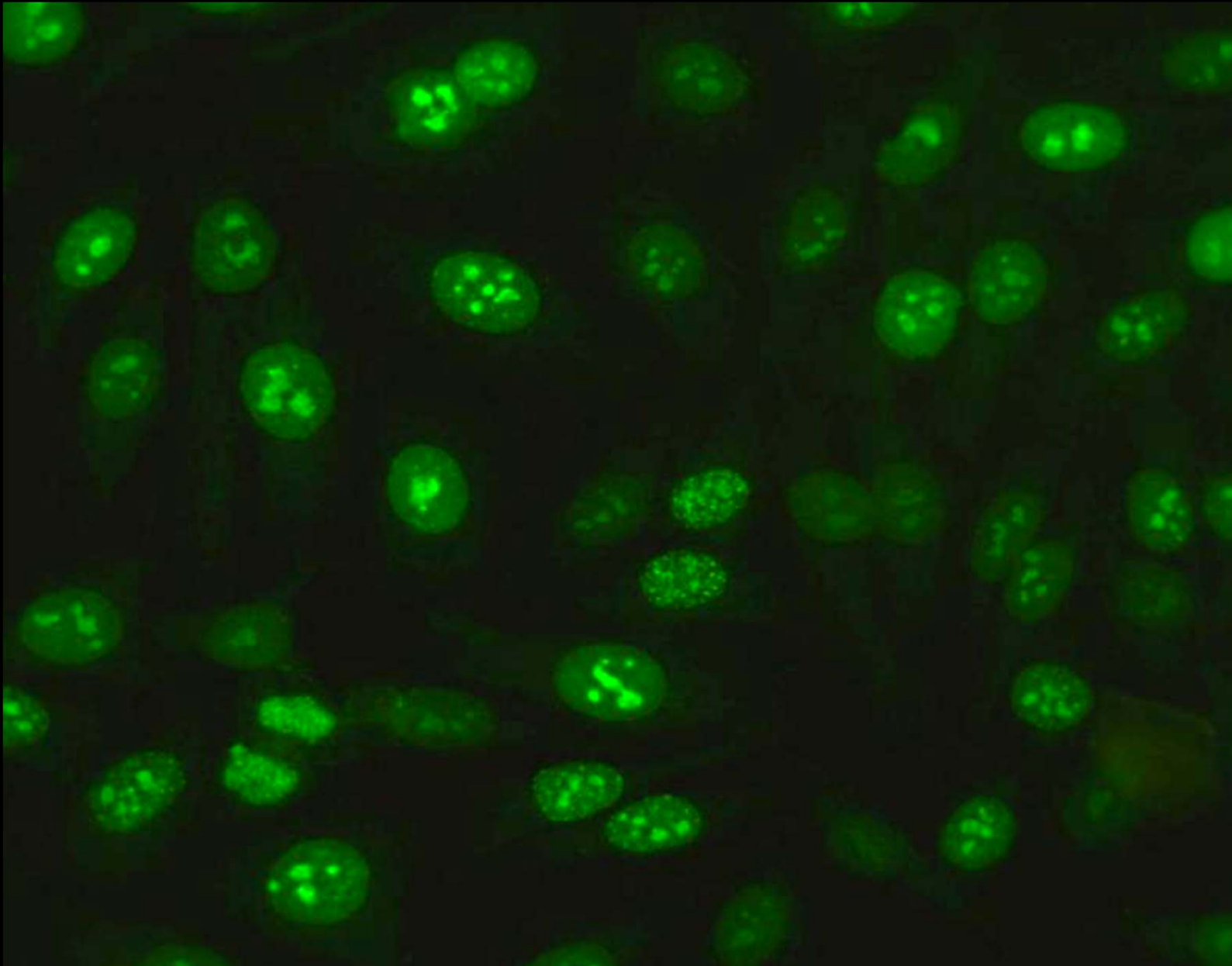
ANTICORPS ANTI - ESPACE PERICHOMOSOMIQUE



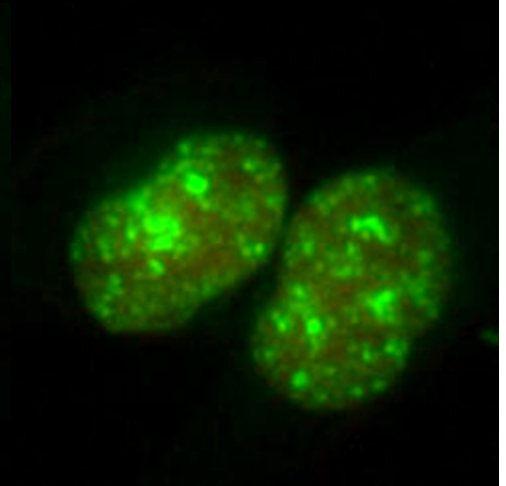
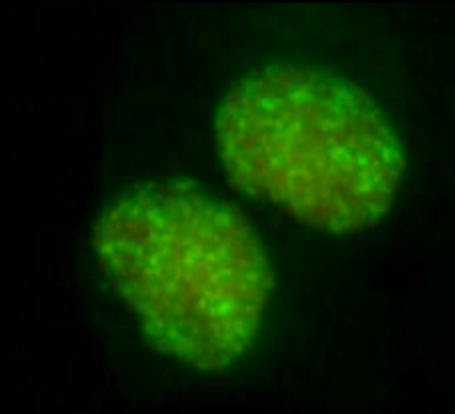
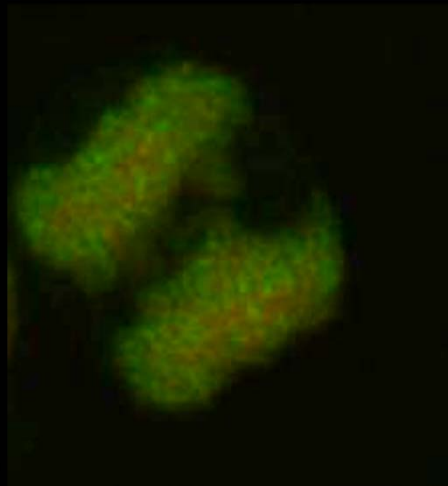
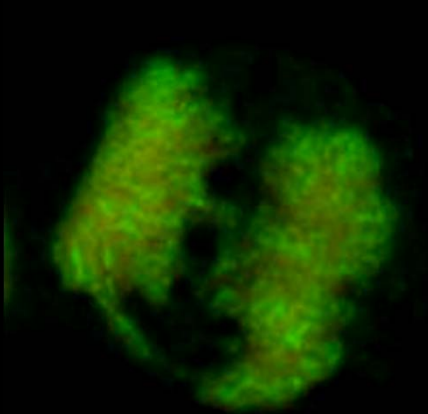
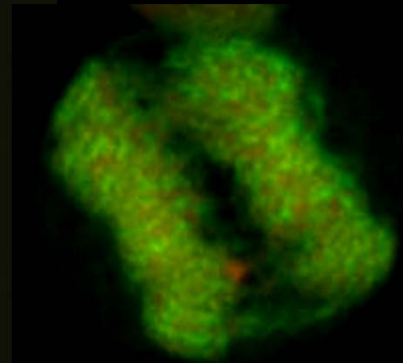
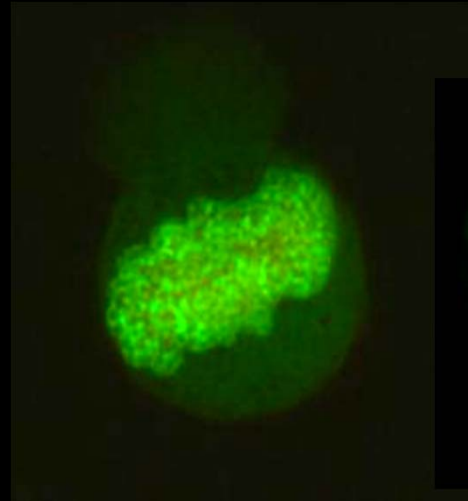
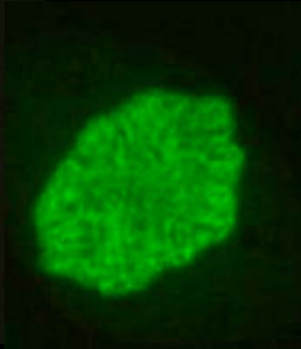
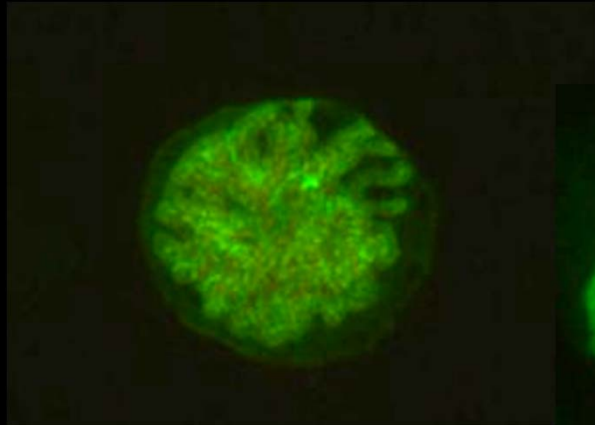
ANTICORPS ANTI - ESPACE PERICHOMOSOMIQUE



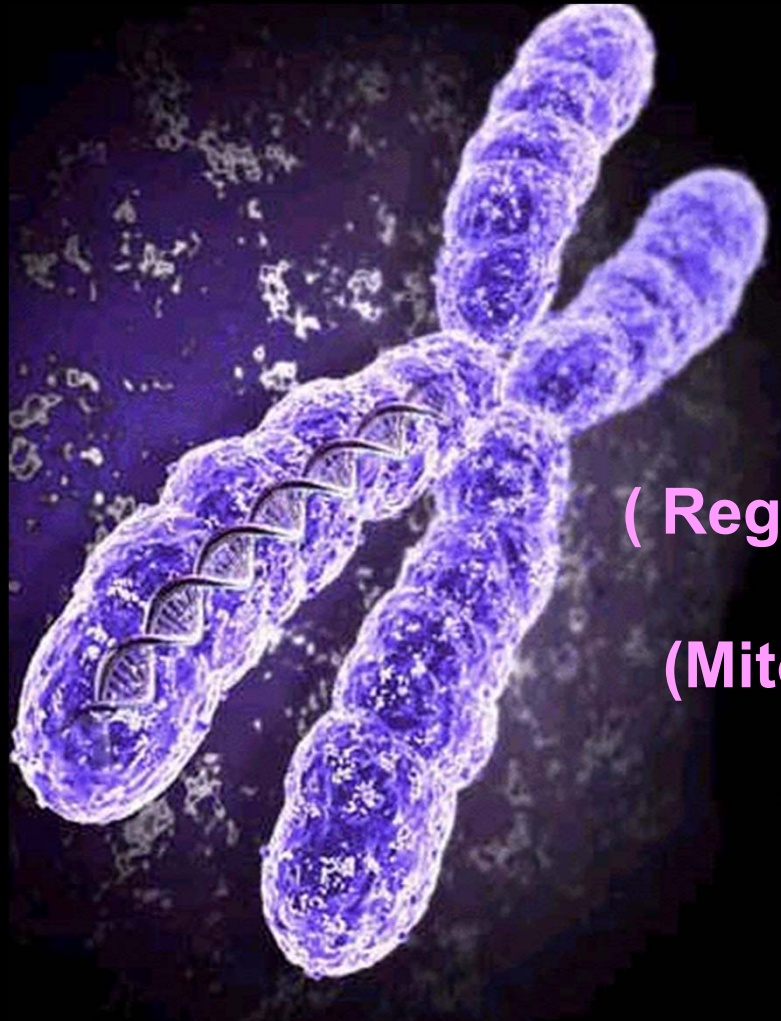
ANTICORPS ANTI – Ki67



ANTICORPS ANTI – Ki67



ANTICORPS ANTI – CHROMOSOMES MITOTIQUES

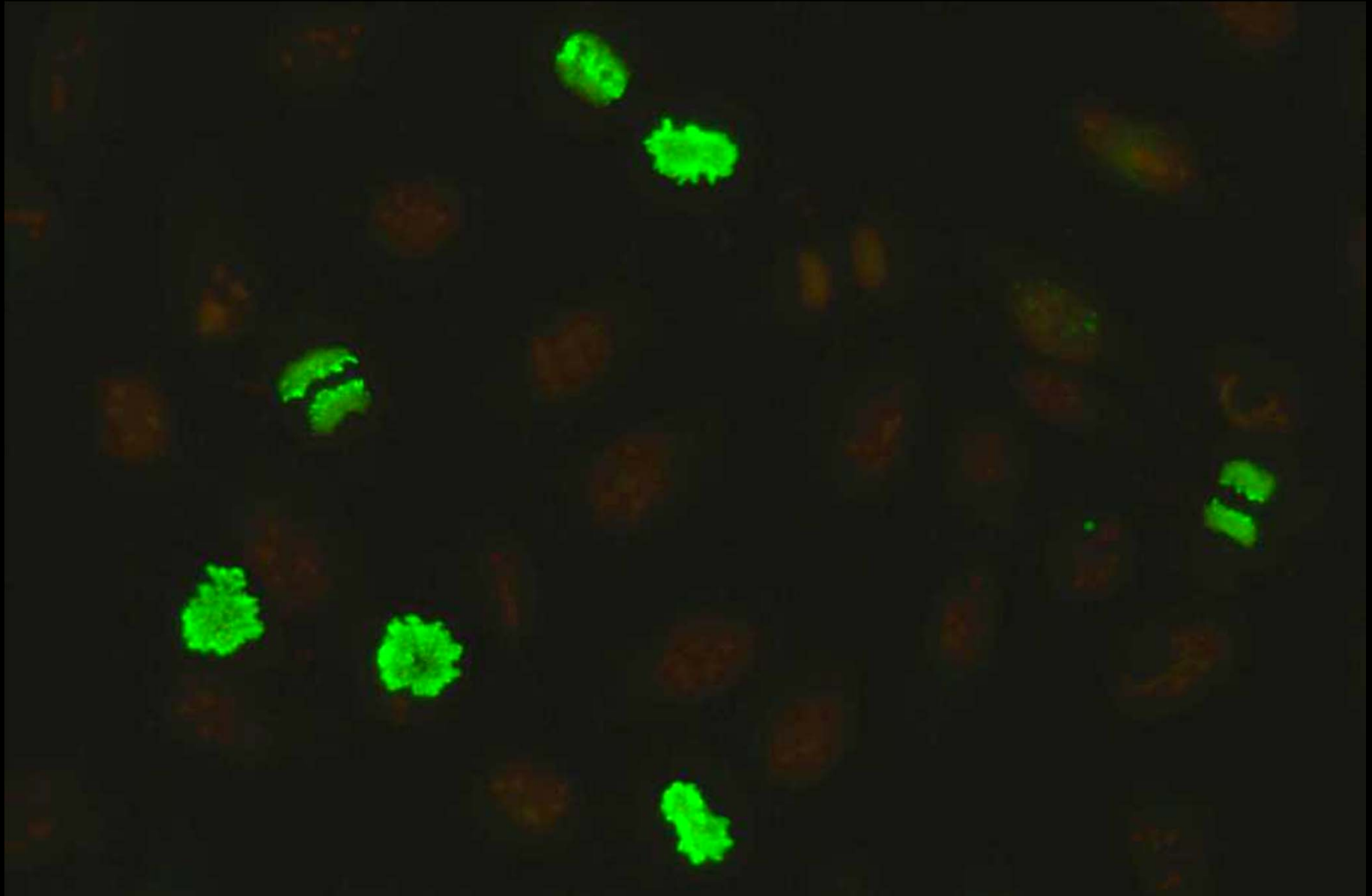


ANTI - RMSA-1
(Regulator Of Mitotic Spindle Assembly)
ANTI – MCA1
(Mitotic Chromosomal Autoantigen 1)

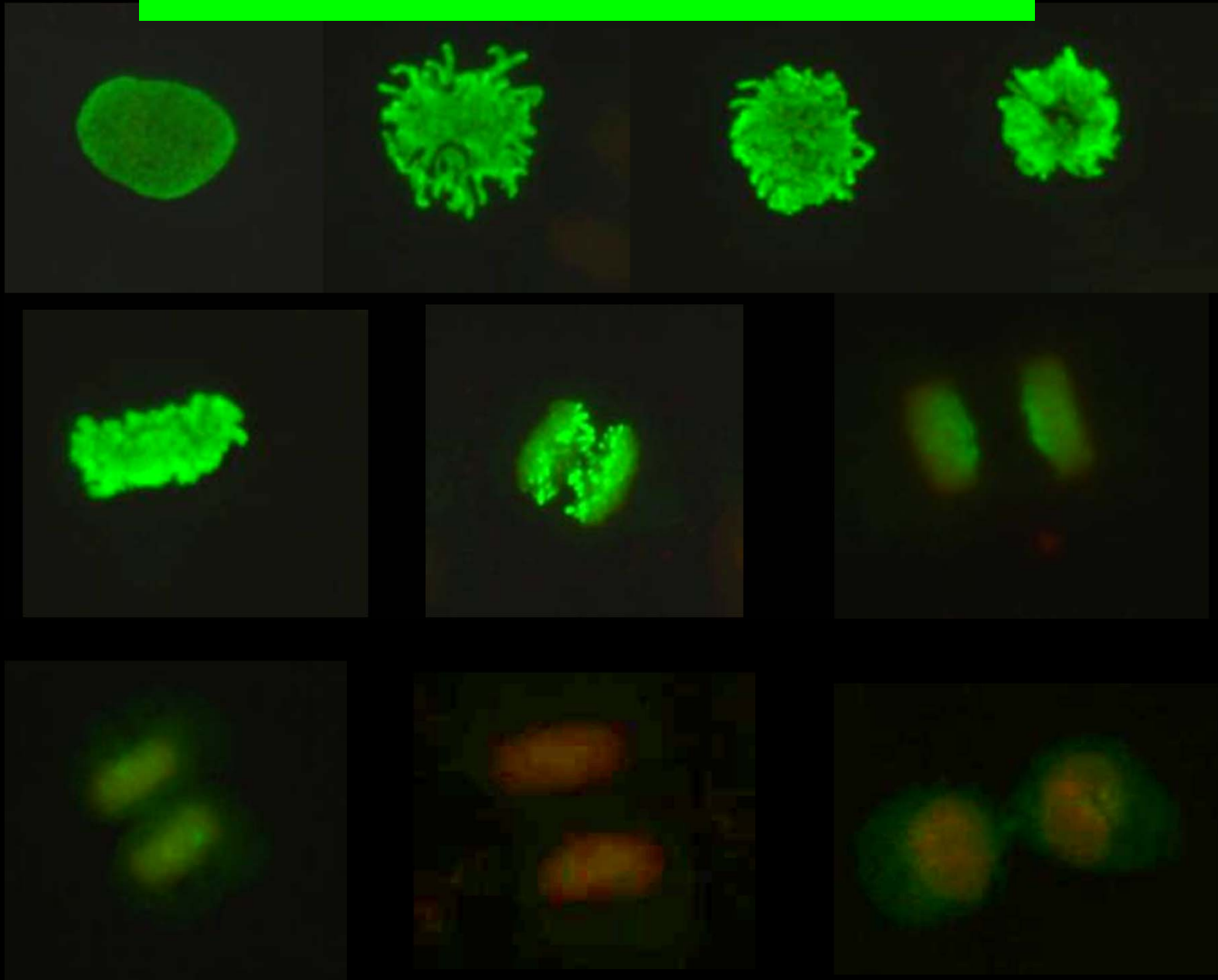
ANTI – CONDENSINE

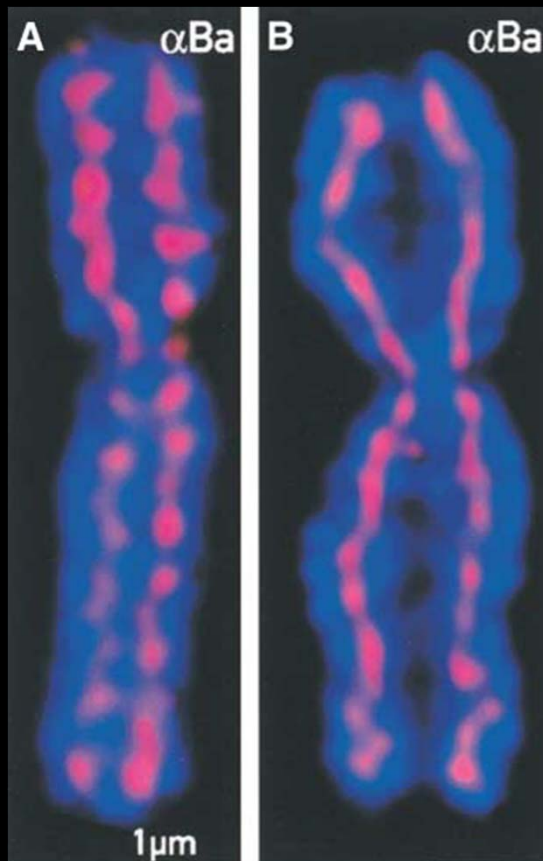
ANTI – TOPOISOMERASE II α

ANTICORPS ANTI-MCA1



ANTICORPS ANTI-MCA1

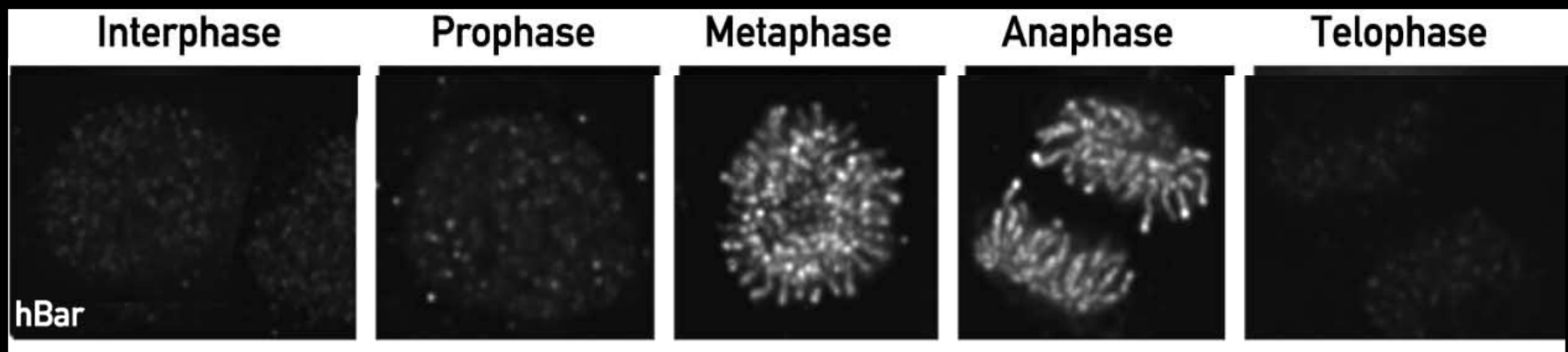




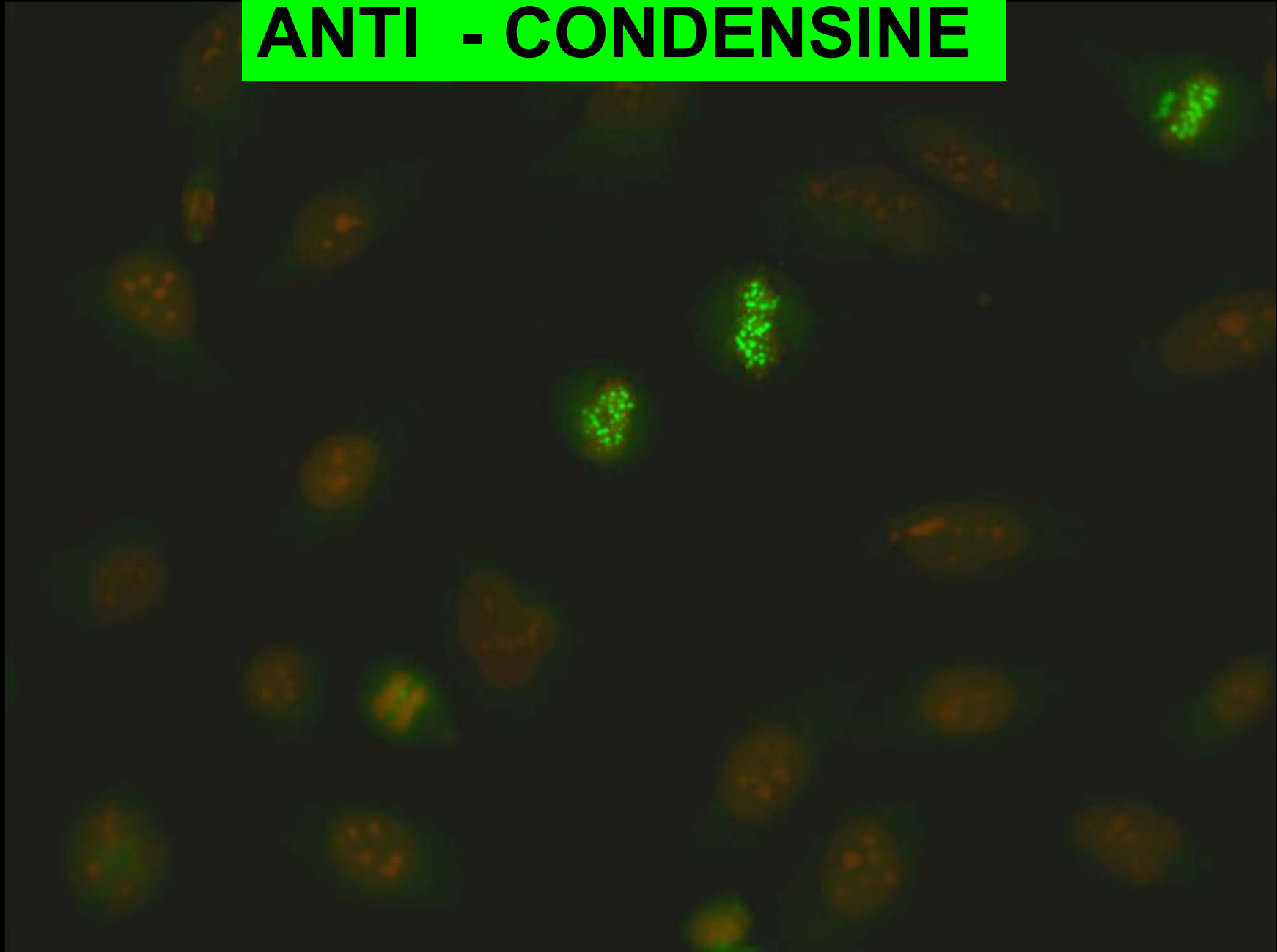
CONDENSINE

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Maeshima et Laemmli
2003

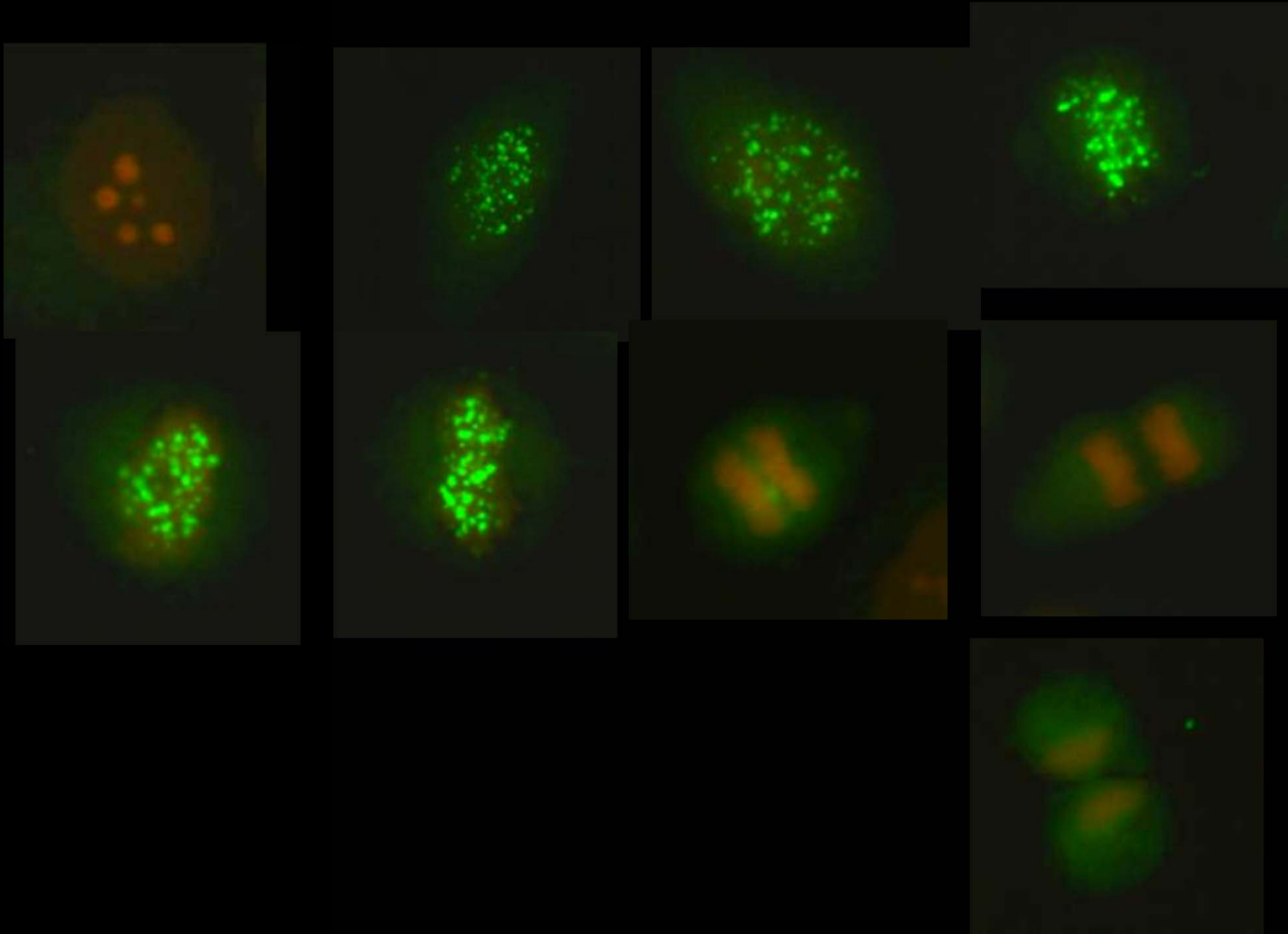


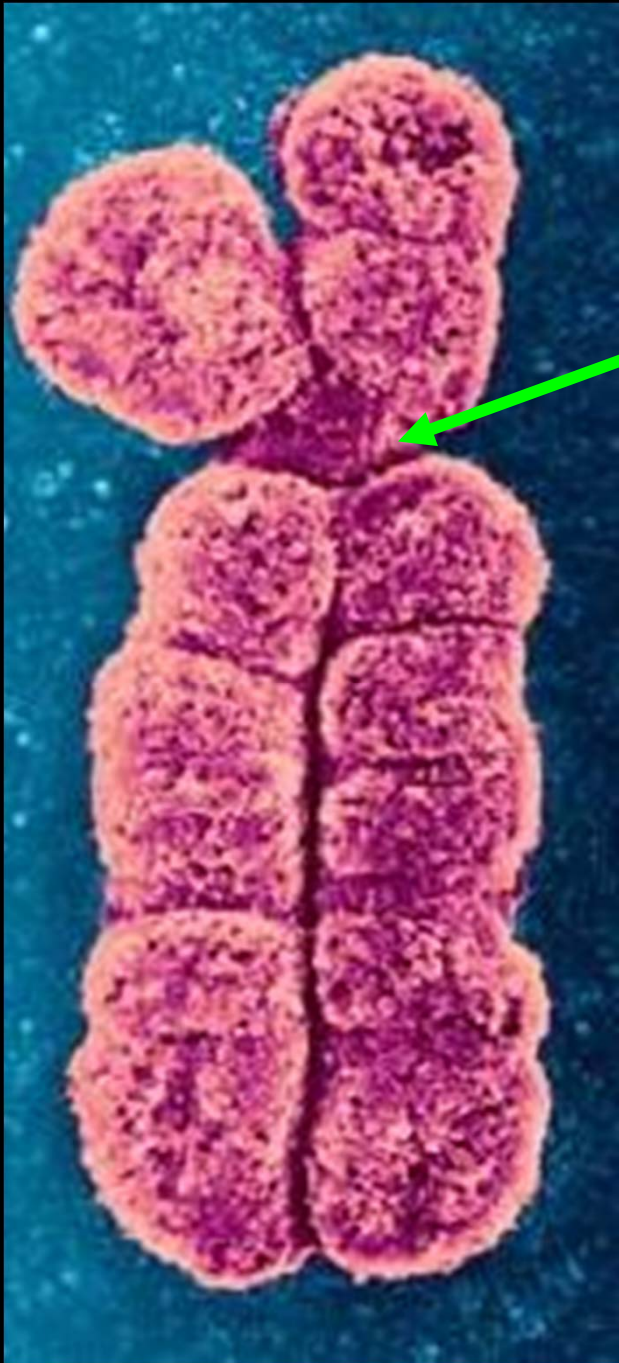
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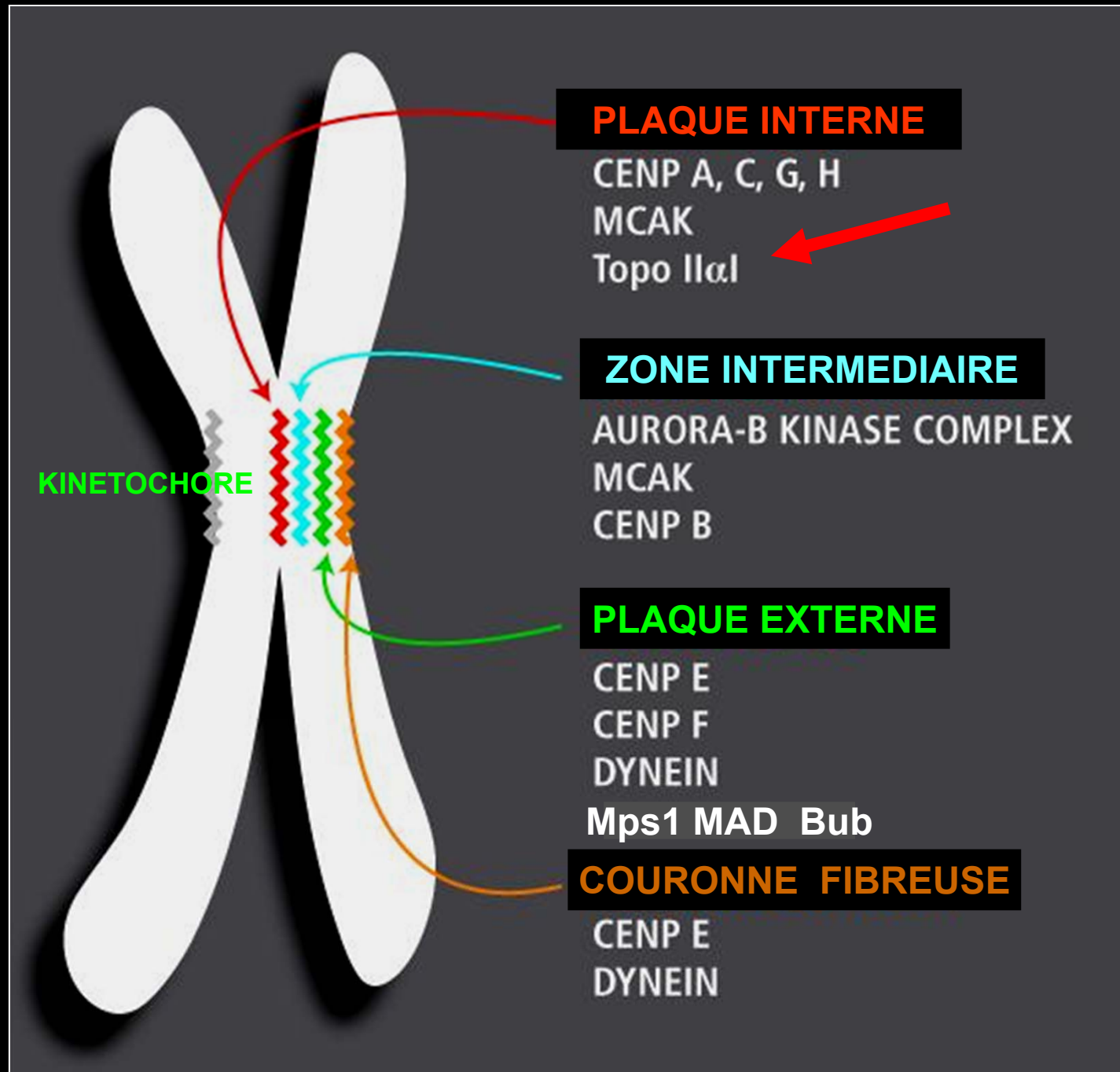
BRO

ANTI - CONDENSINE

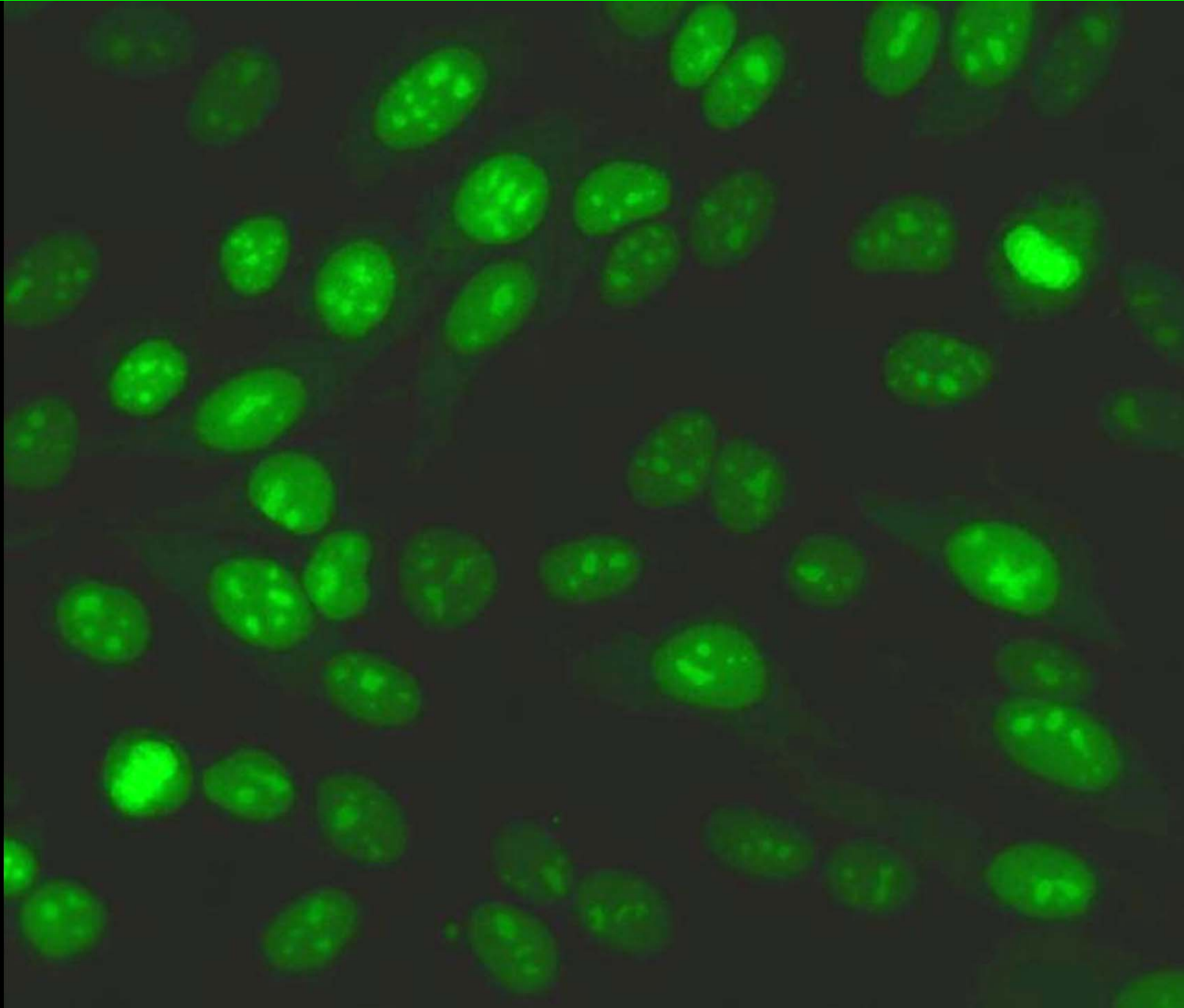




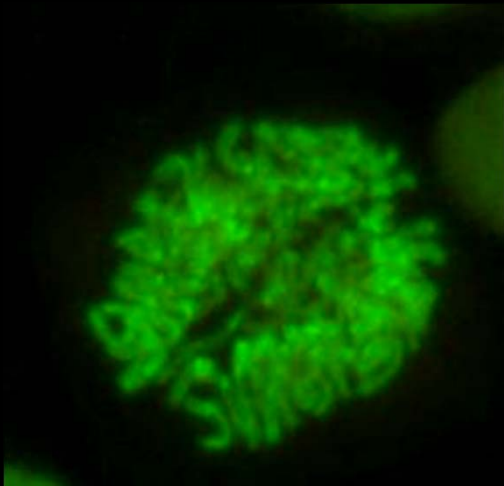
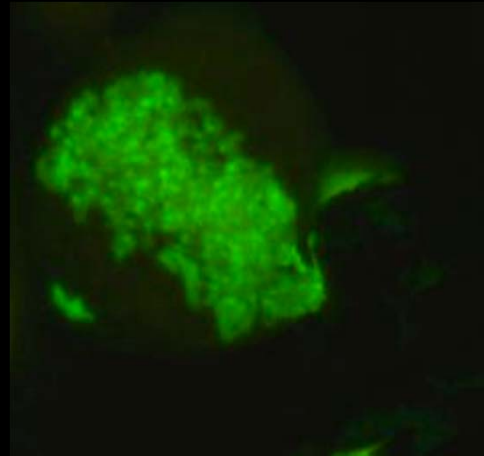
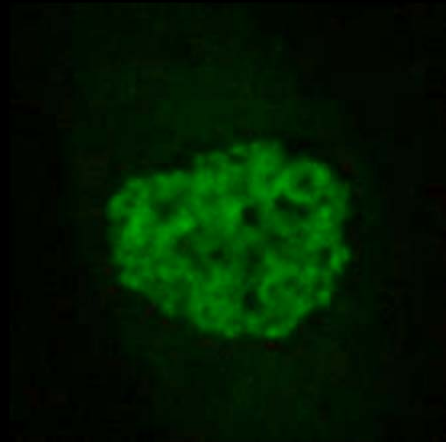
**ANTICORPS ANTI -
CENTROMERE
MITOTIQUE**

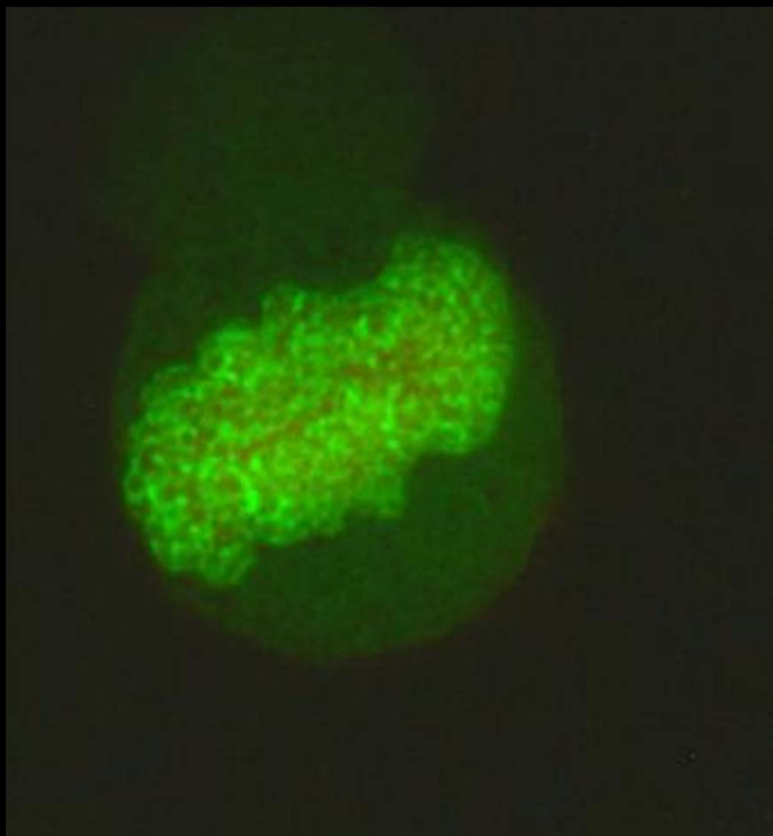


ANTICORPS ANTI - TOPOISOMERASE II α

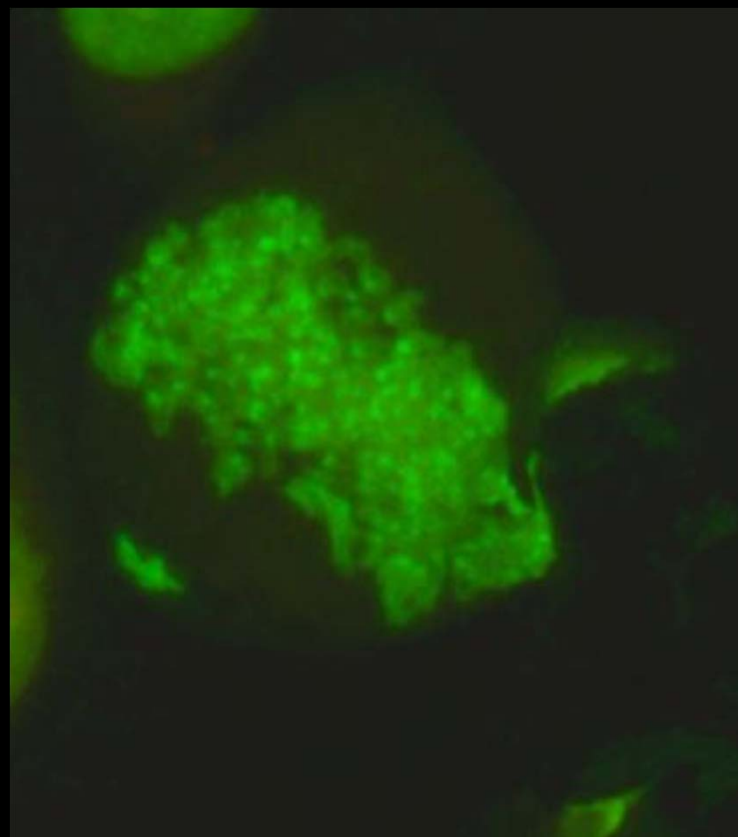


ANTICORPS ANTI - TOPOISOMERASE II α

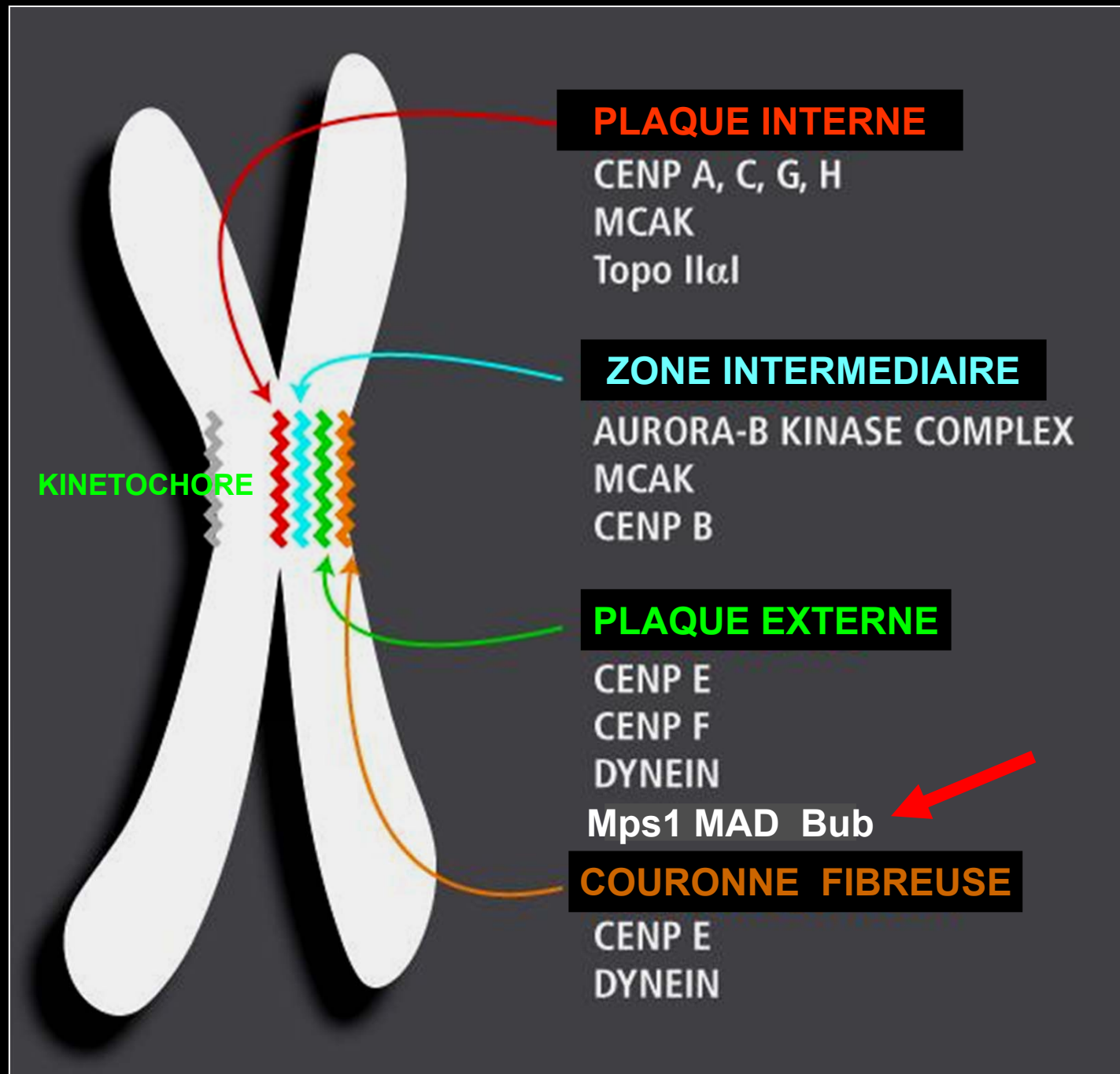




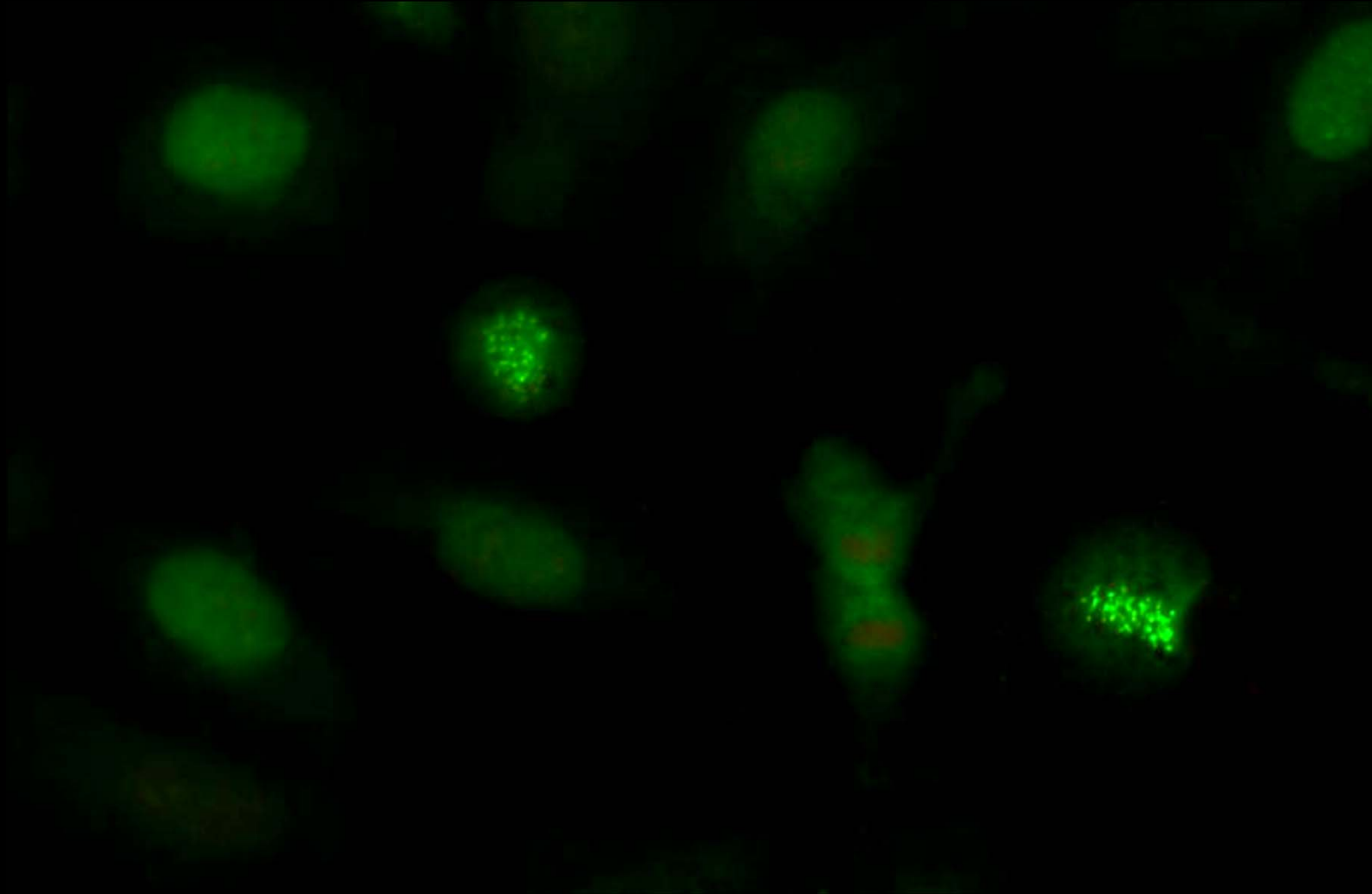
Ki67

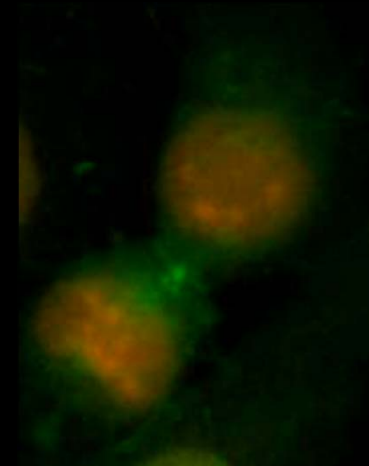
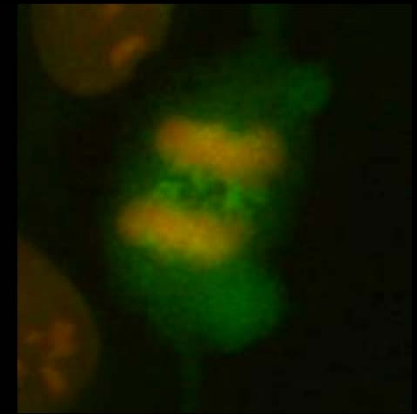
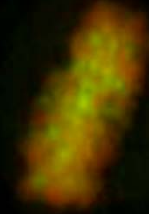
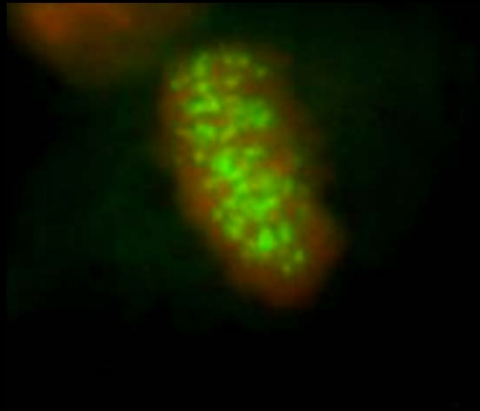
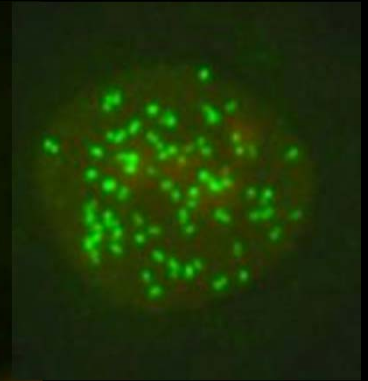
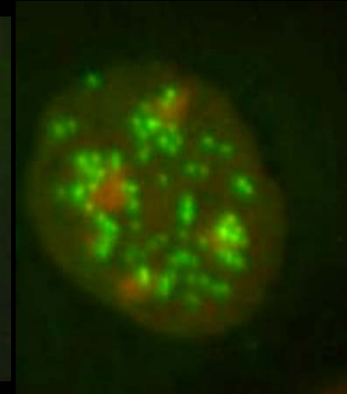
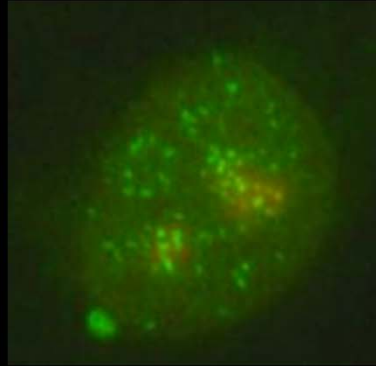
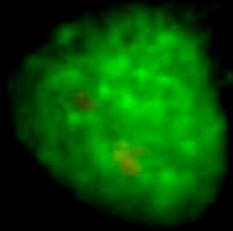
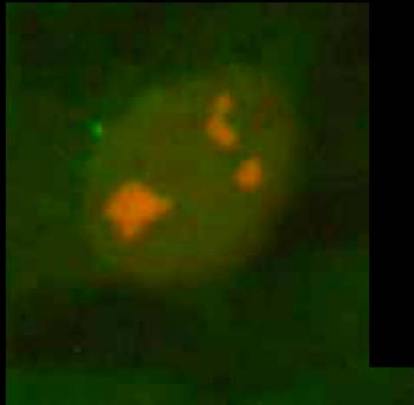


TOPO II α

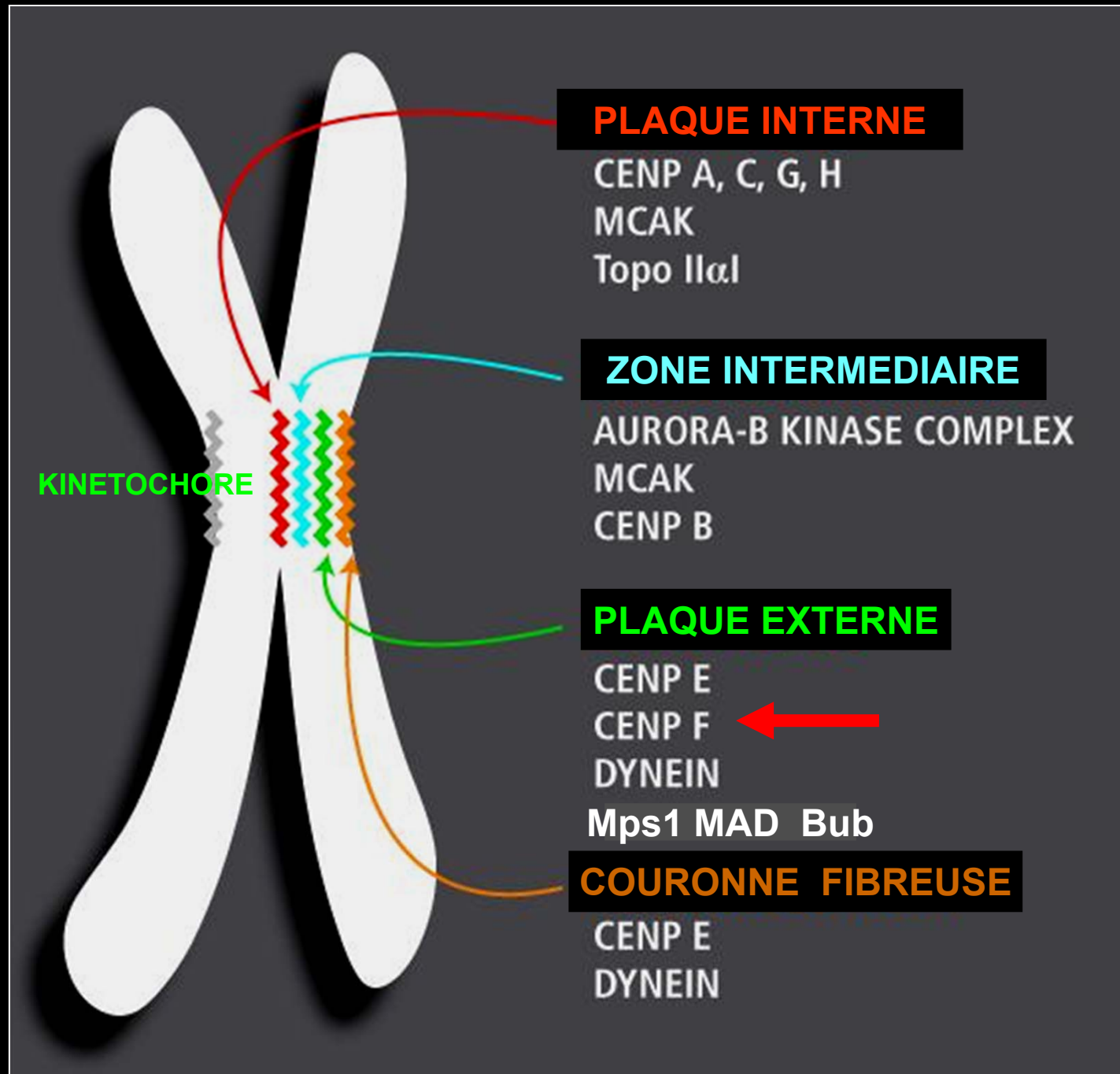


ANTICORPS ANTI – Bub 1 ?

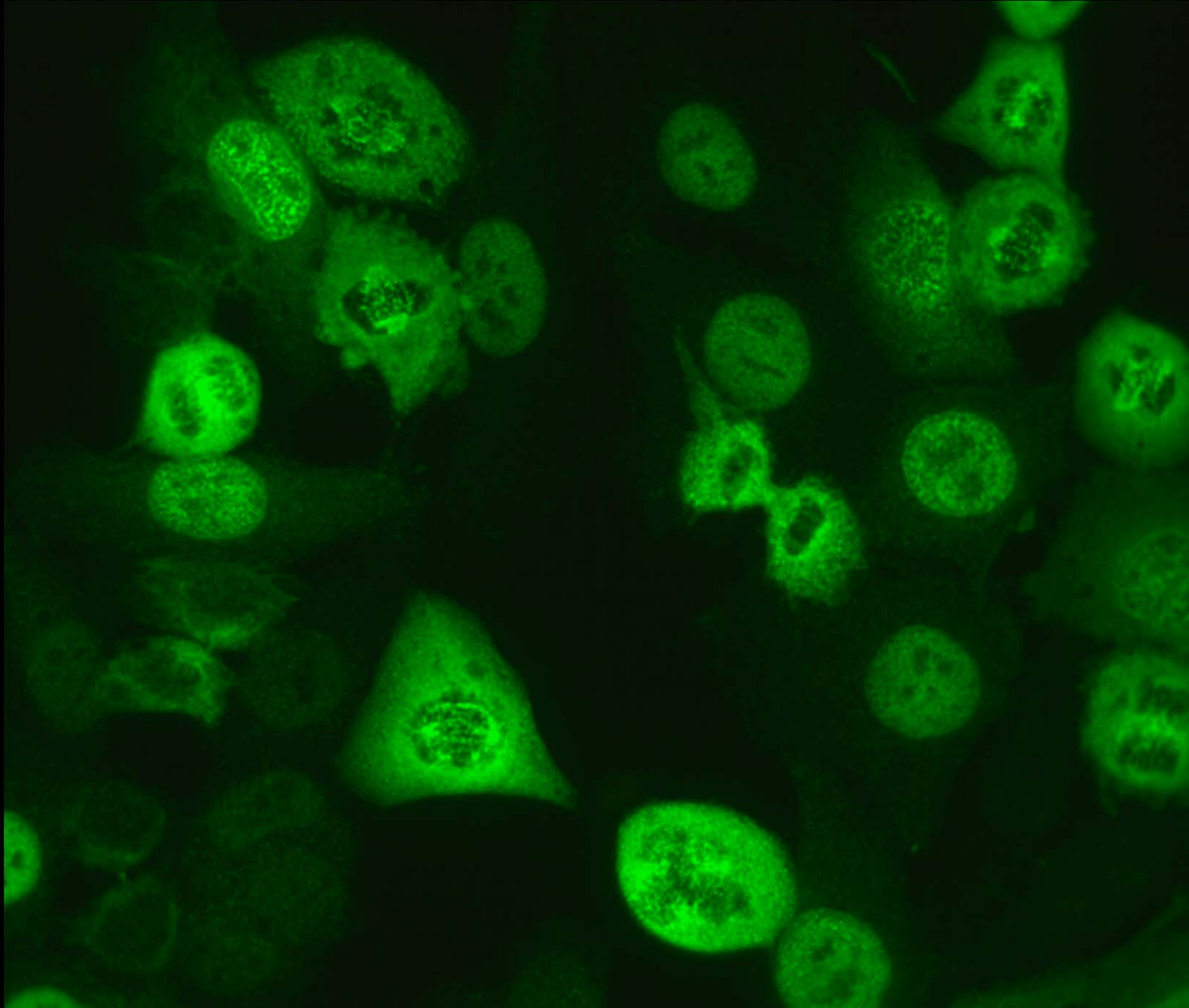


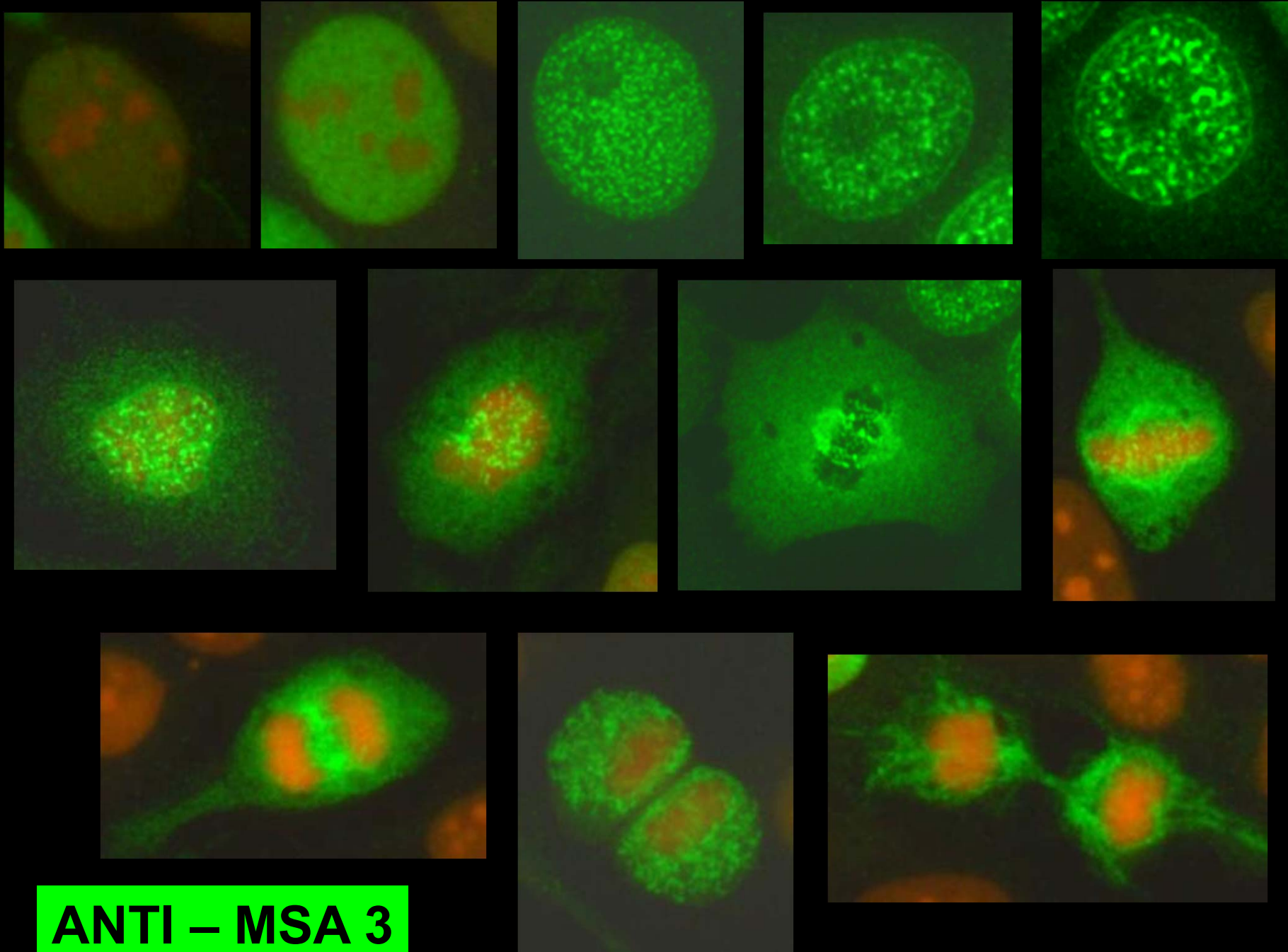


ANTICORPS ANTI – Bub 1



ANTICORPS ANTI - MSA3 (CENP F)





ANTI – MSA 3

ANTI-MSA3 ANTIBODIES

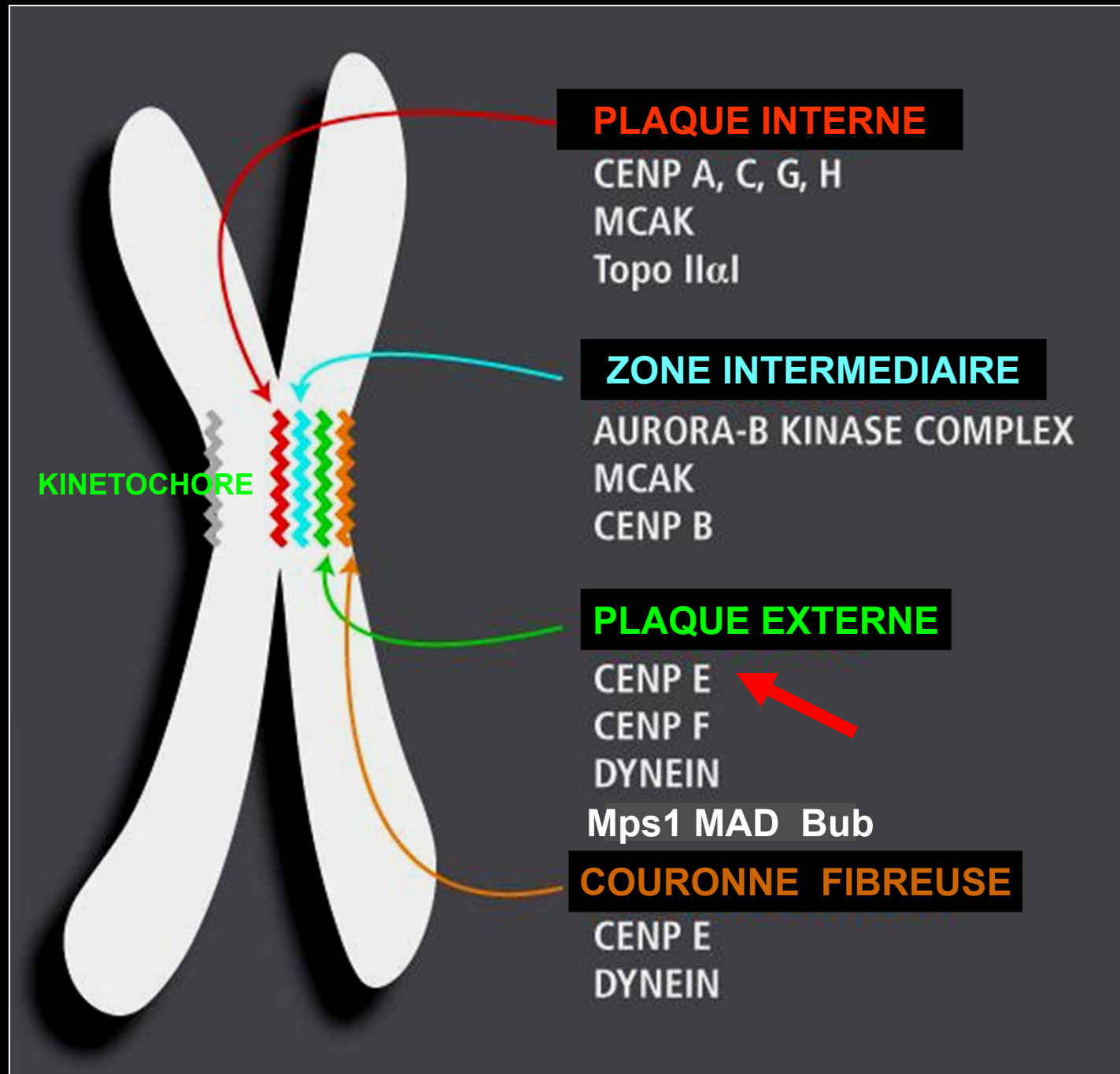
CANCERS

(54%)

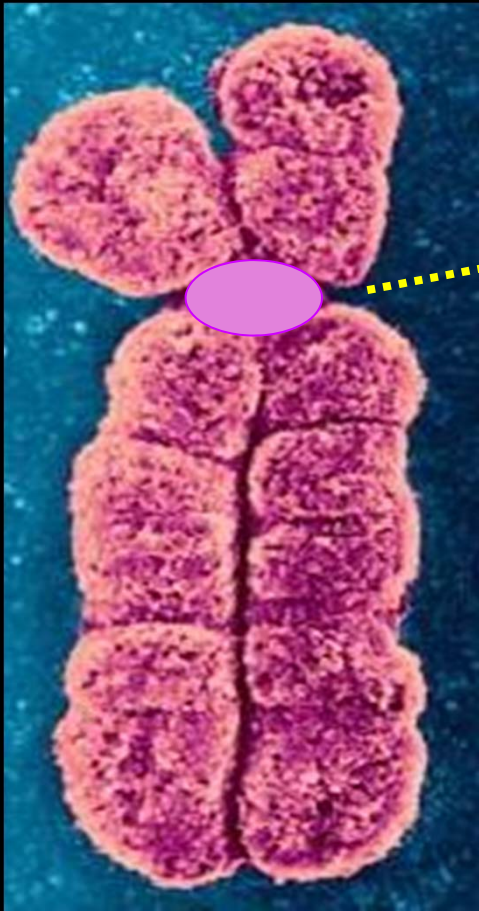
**Breast, Lung, Stomach,
Tracheal, Tonsilar,
Nasopharyngeal
Hepatocellular,
Waldenström**

OTHERS

**Chronic Liver Disease
Rejection of Renal Allographes
Crohn's Disease**



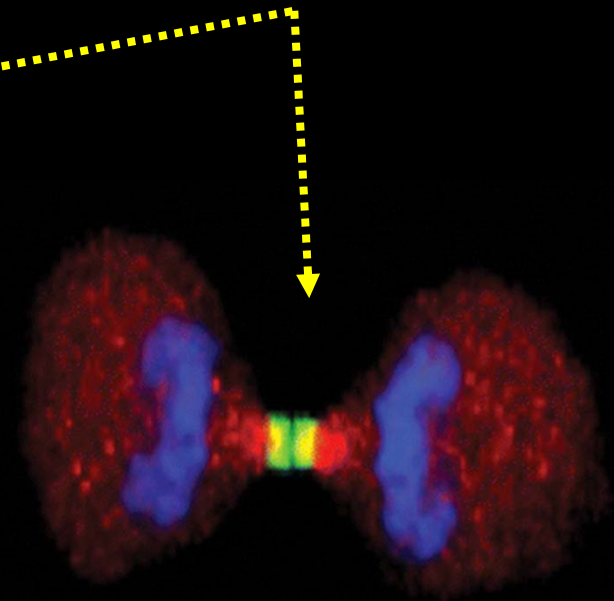
ANTICORPS ANTI - PROTEINES CHROMOSOMIQUES PASSAGERES



CENP E
AURORA B

CHROMOSOME

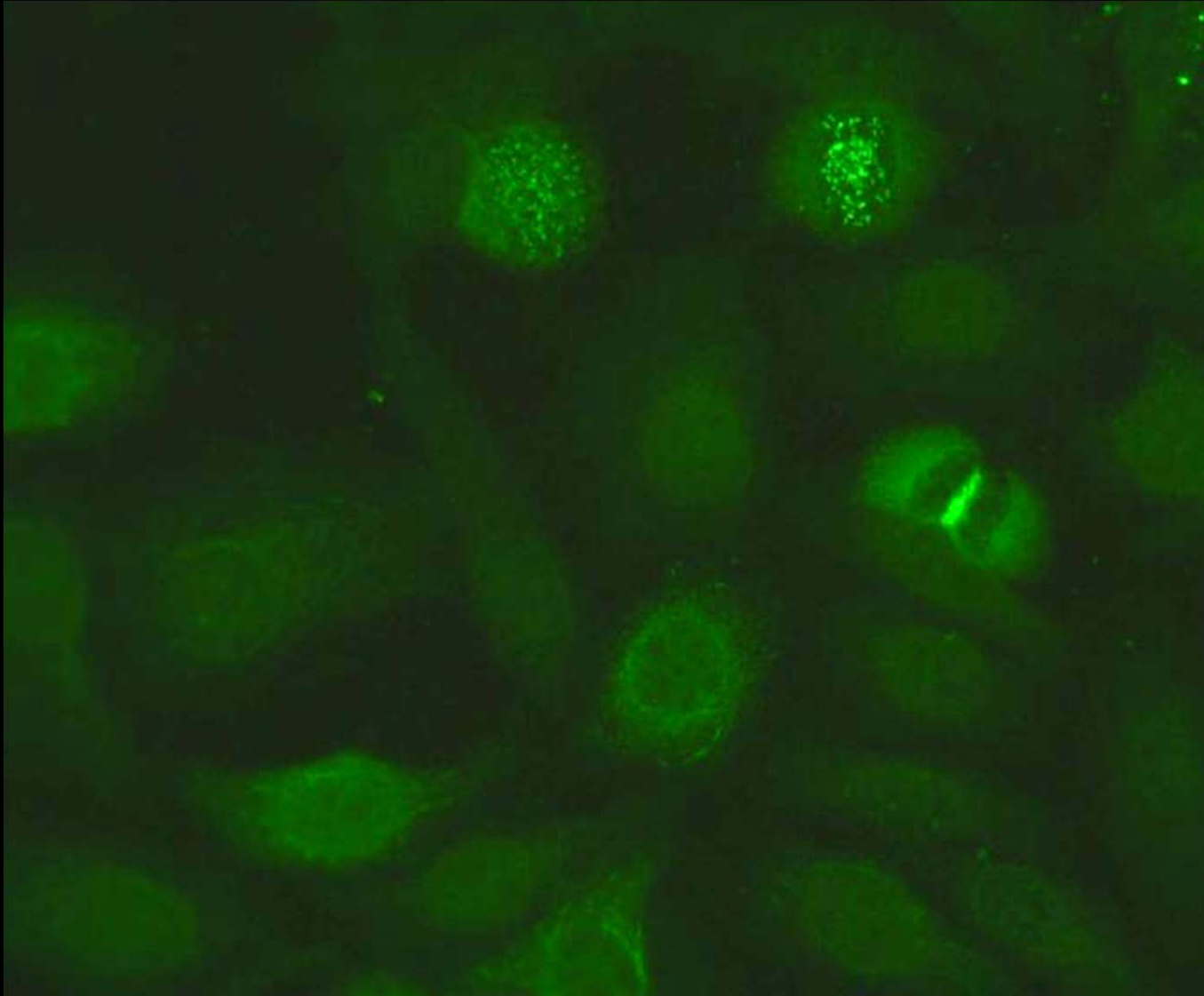
PROPHASE / METAPHASE

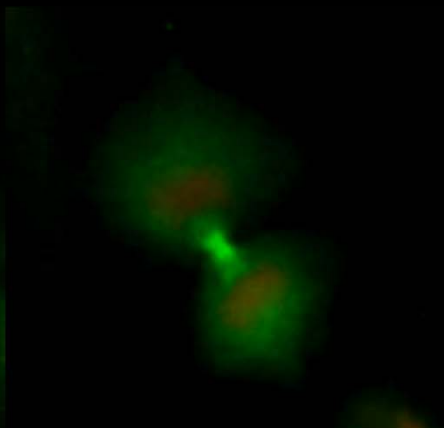
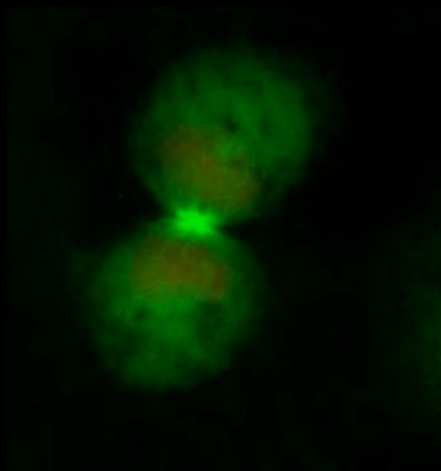
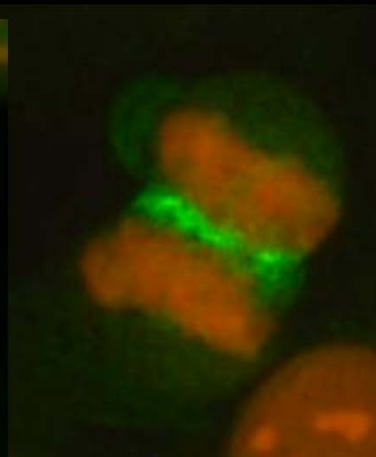
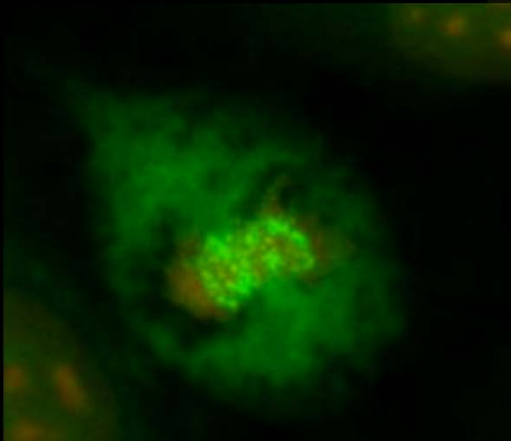
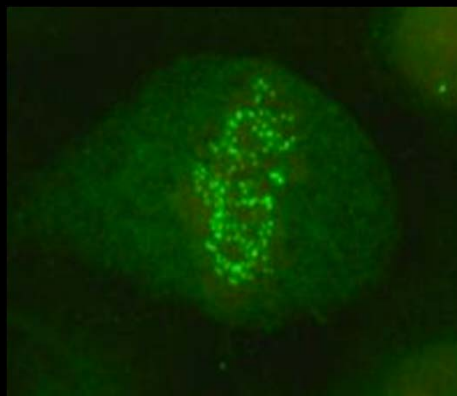
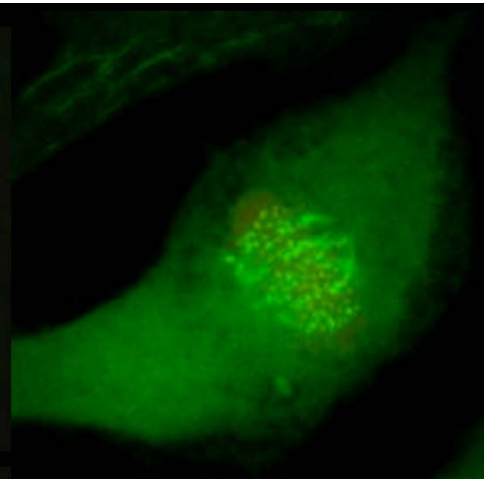
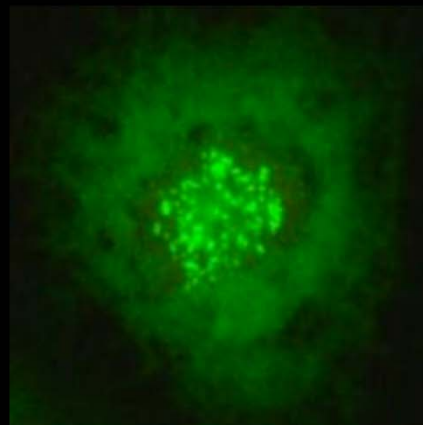
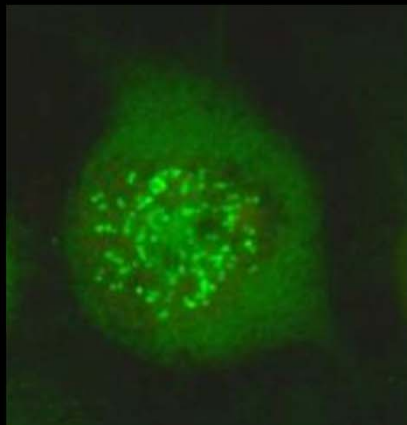
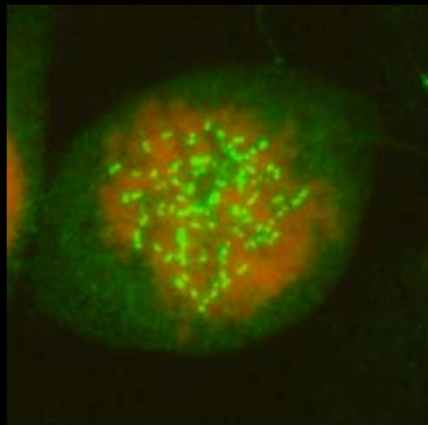


CORPS INTERMEDIAIRE

TELOPHASE / CYTODIERESE

ANTICORPS ANTI – CENTROMERE E

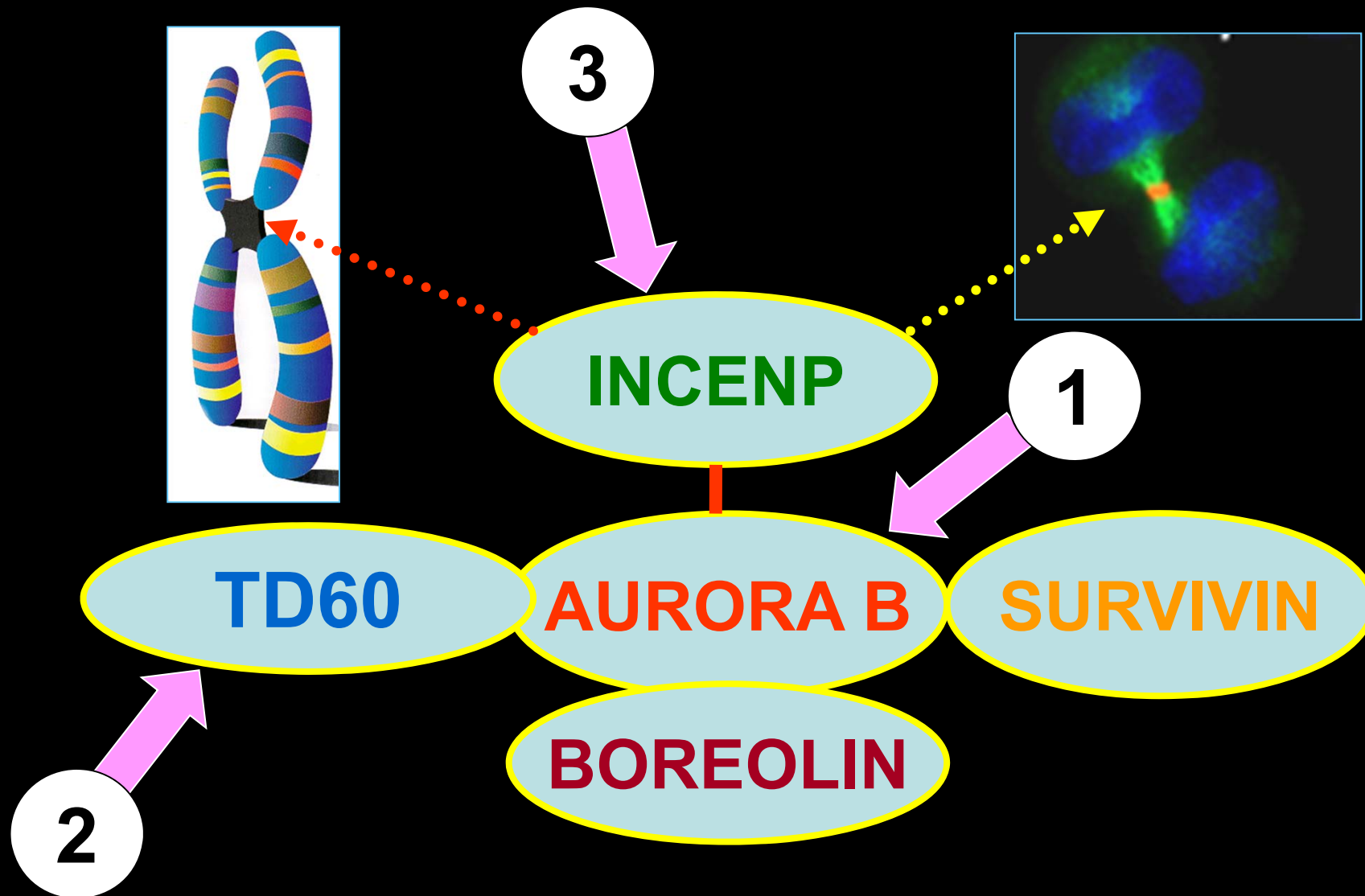




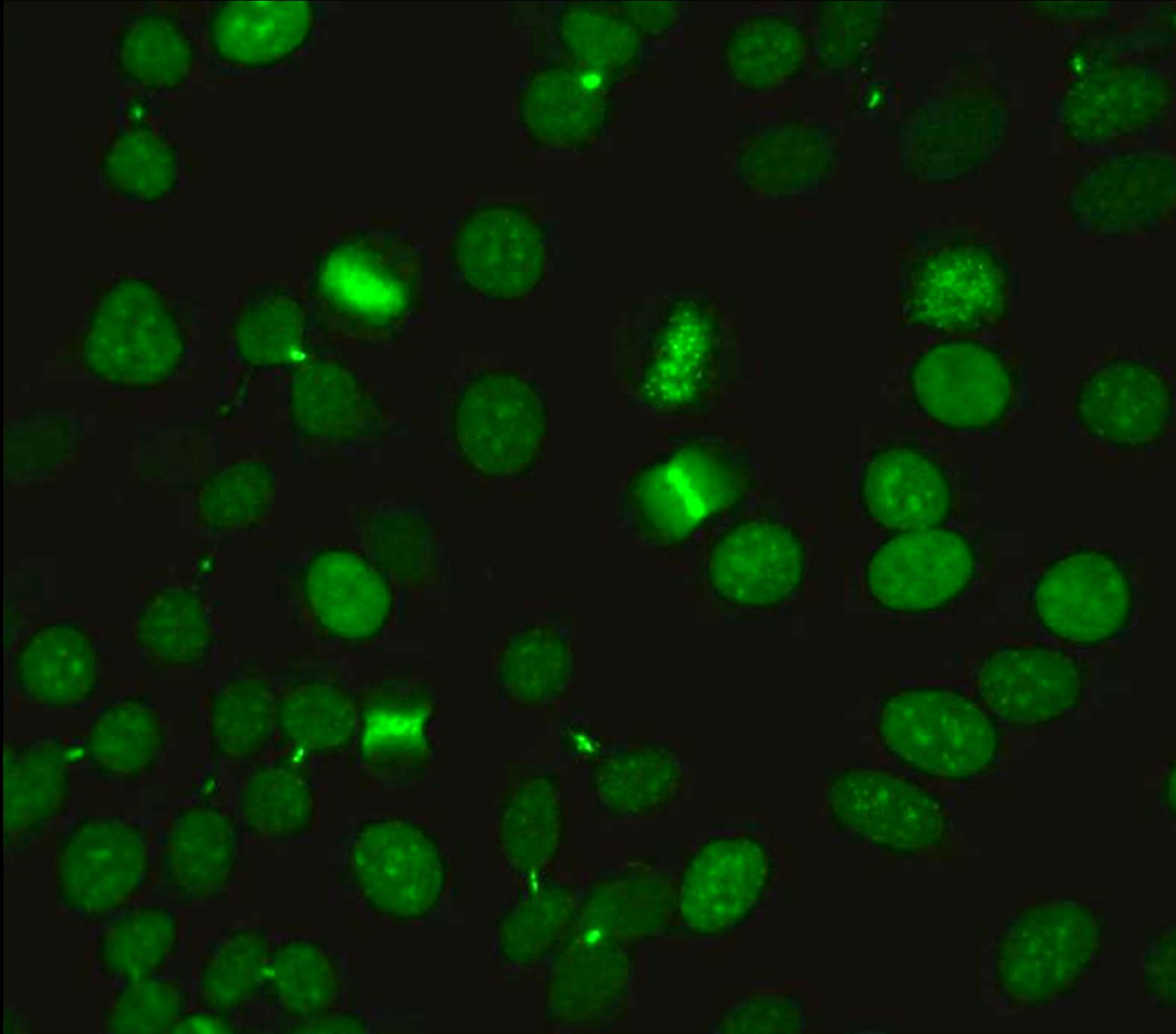
CENP E

ANTI – MSA 2

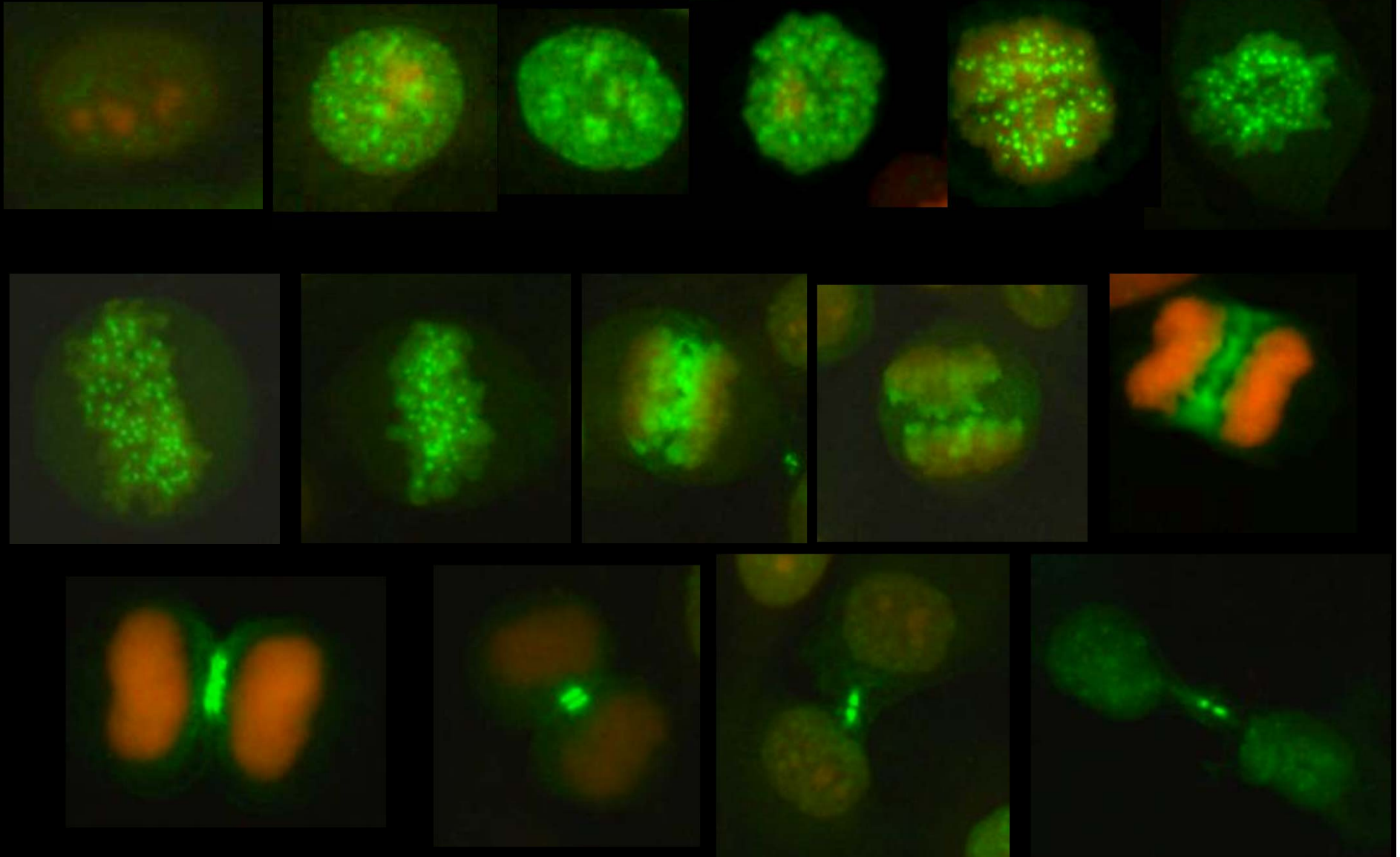
COMPLEXE DE L'AURORAKINASE B



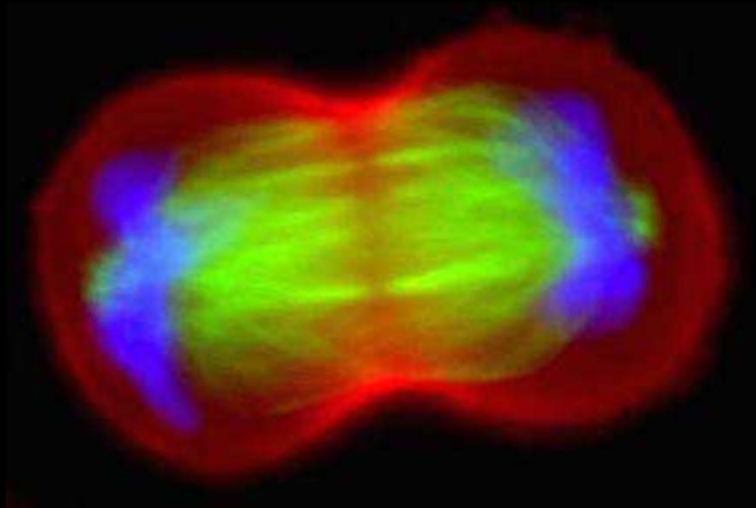
ANTICORPS ANTI- MSA2



ANTICORPS ANTI- MSA2



ANTICORPS ANTI – APPAREIL MITOTIQUE



FUSEAU MITOTIQUE

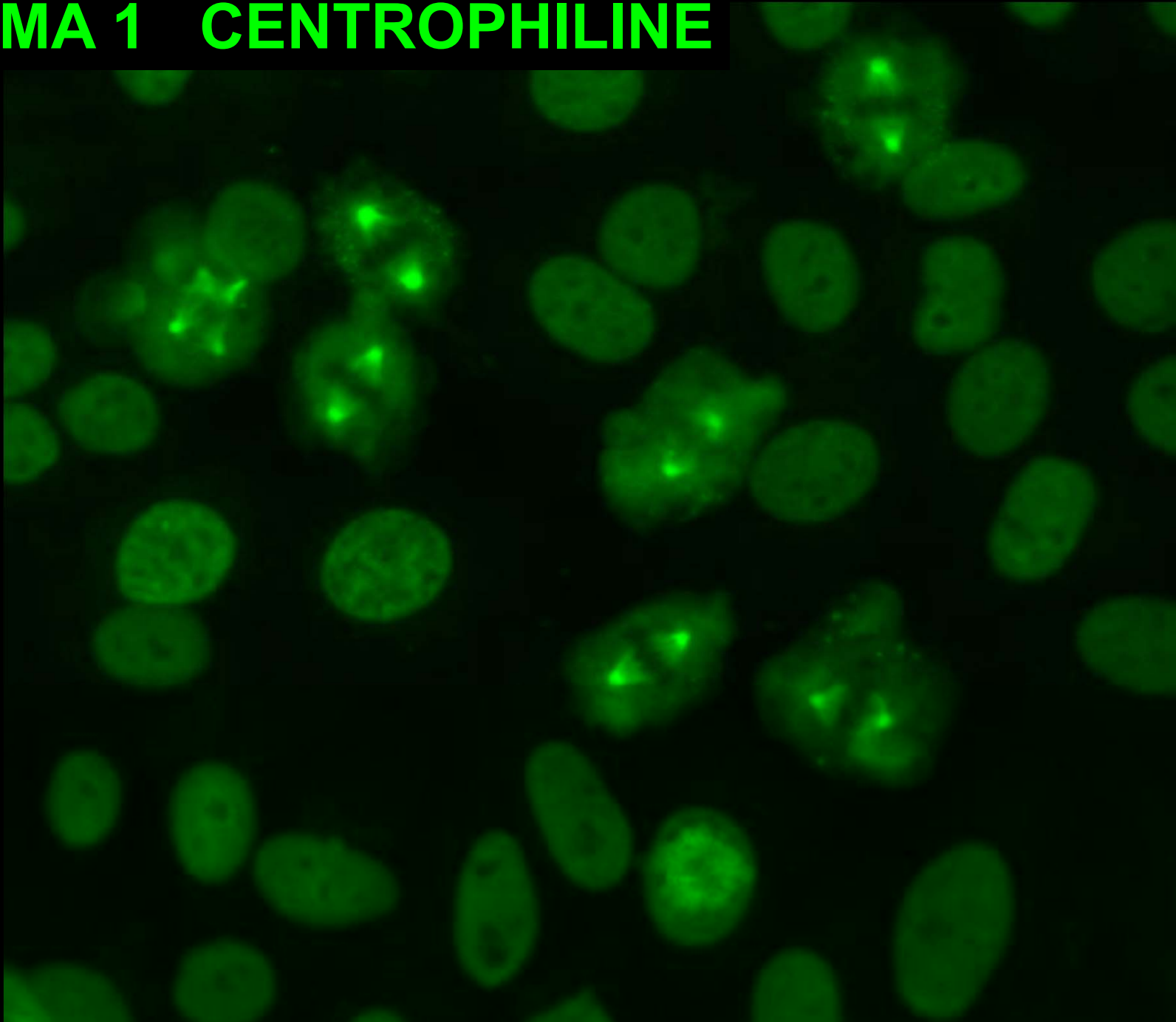
NUMA 1

CENTROPHILINE

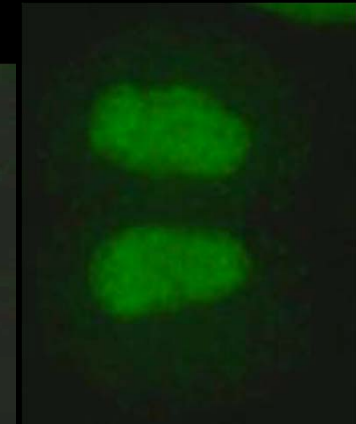
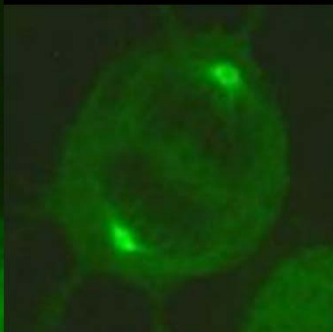
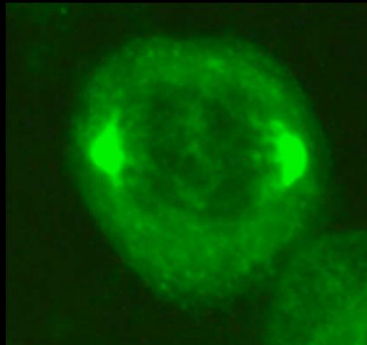
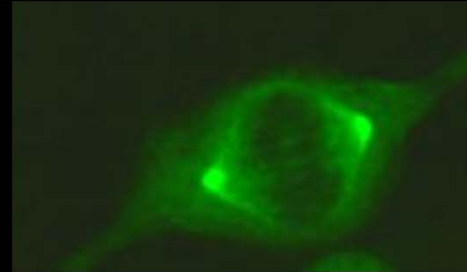
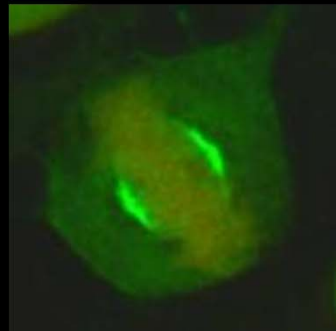
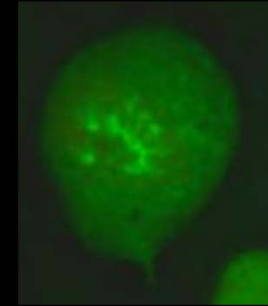
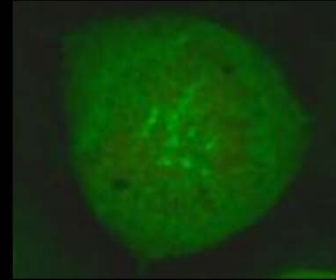
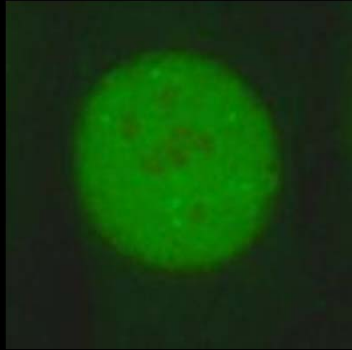
NUMA 2

AURORA KINASE A
KINESINE Eg5

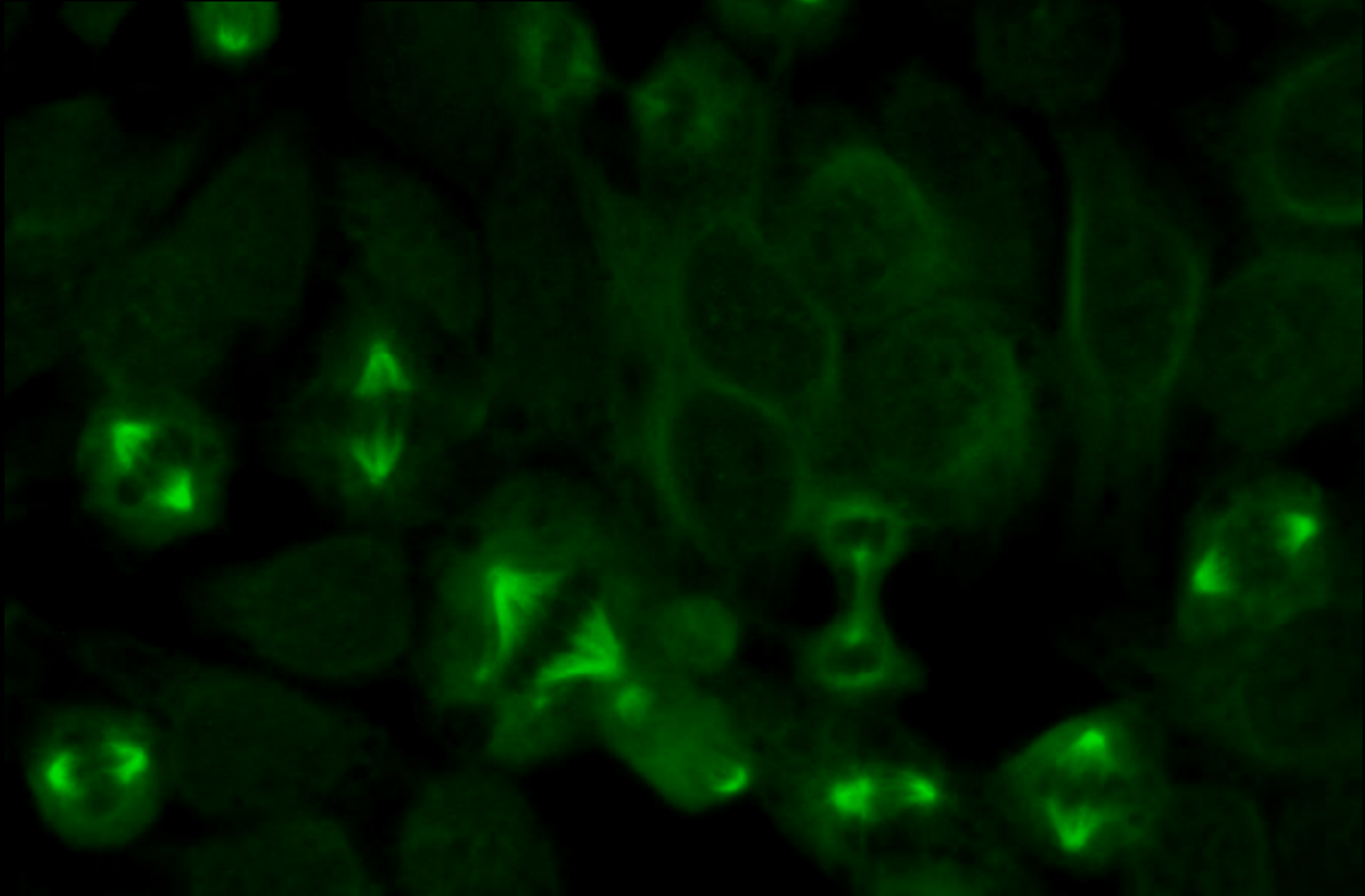
NUMA 1 CENTROPHILINE

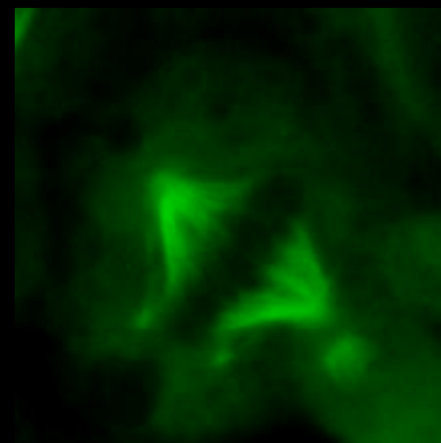
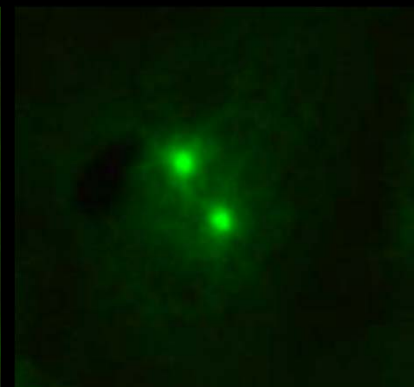
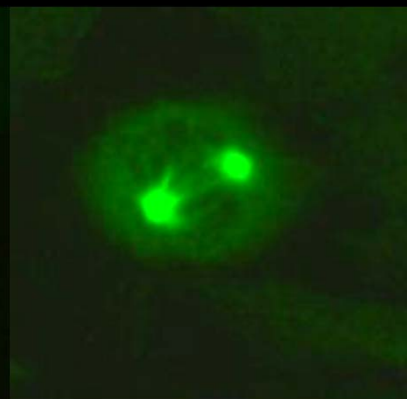
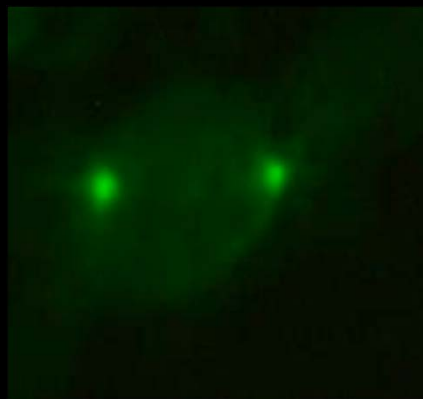


NUMA 1

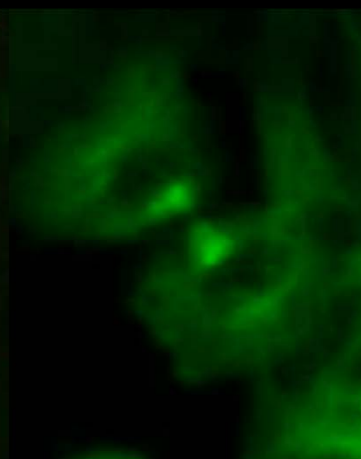


NUMA 2 :AURORA A BIMC Hg5



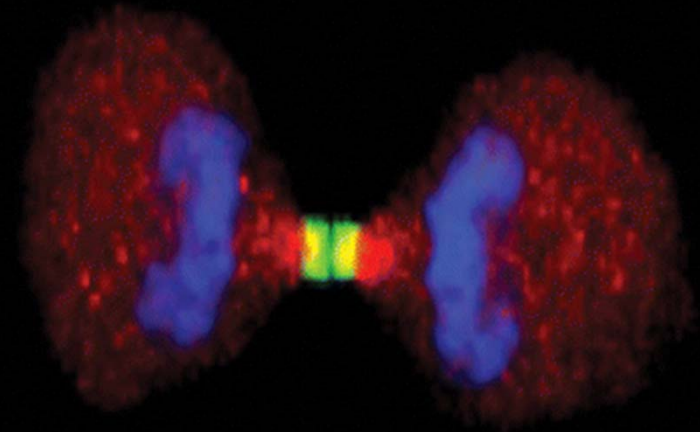


NUMA 2



ANTICORPS ANTI – CORPS INTERMEDIAIRE

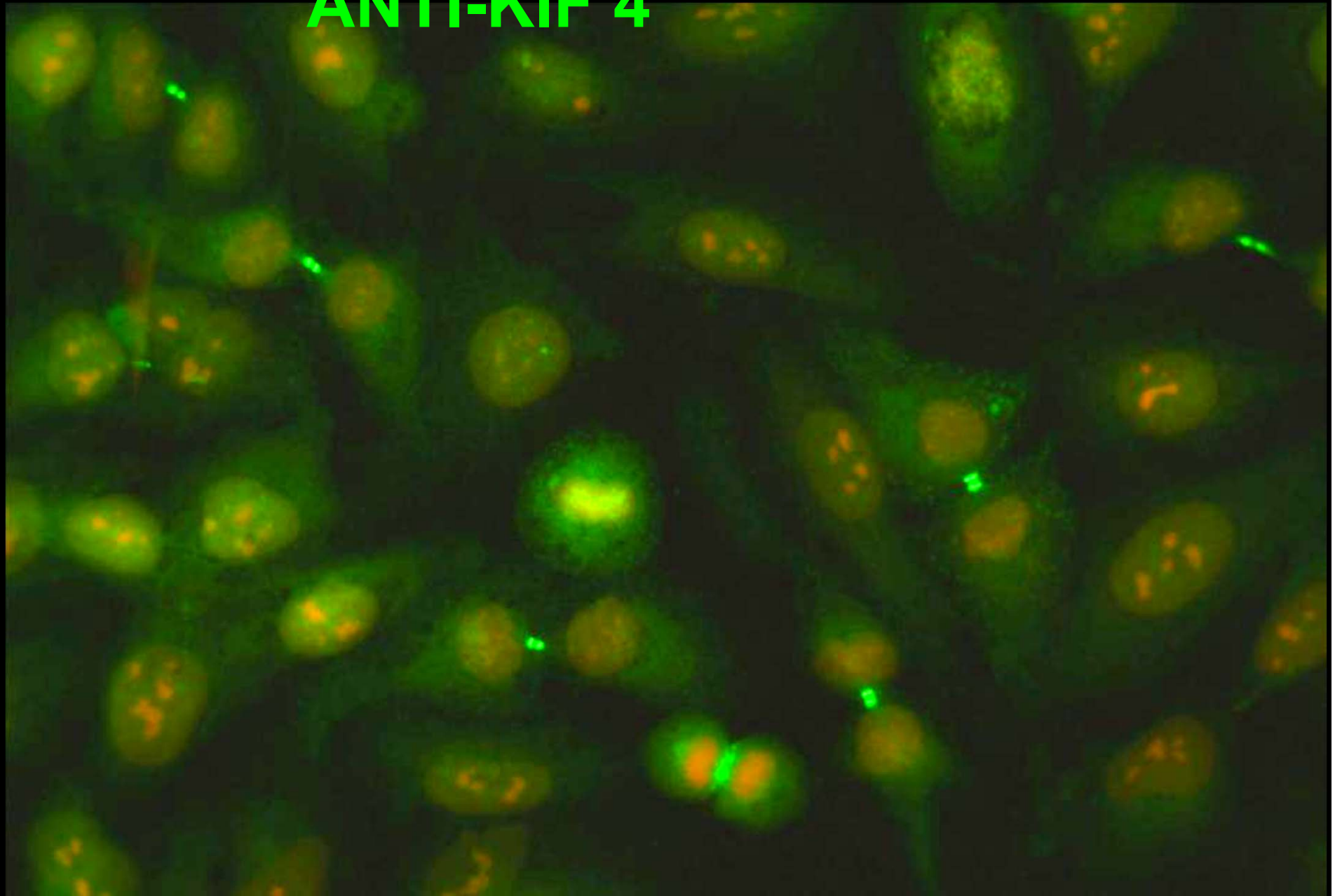
CORPS INTERMEDIAIRE



KINESINE MKLP1

KINESINE KIF 4

ANTI-KIF 4



ANTI-MKLP1

