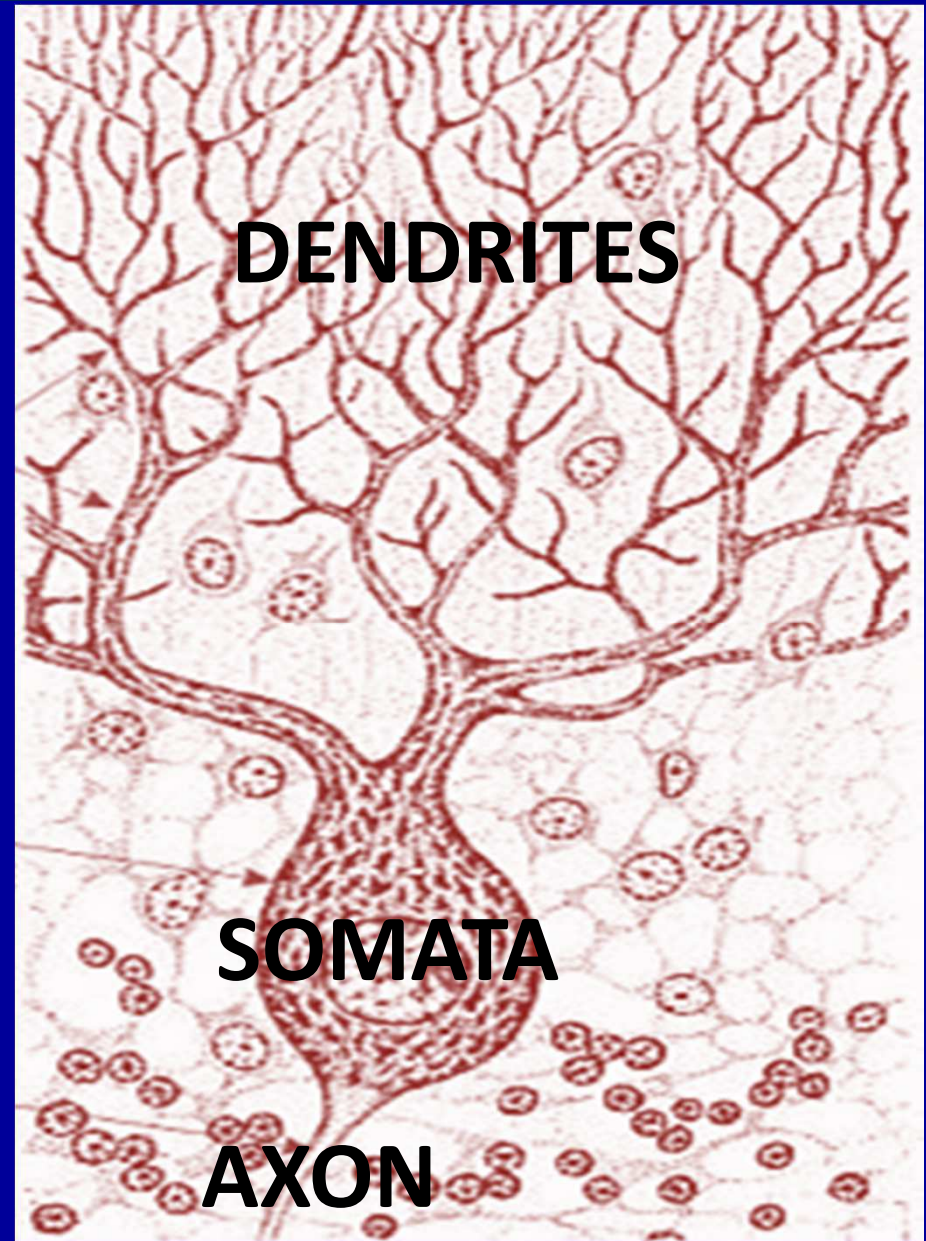
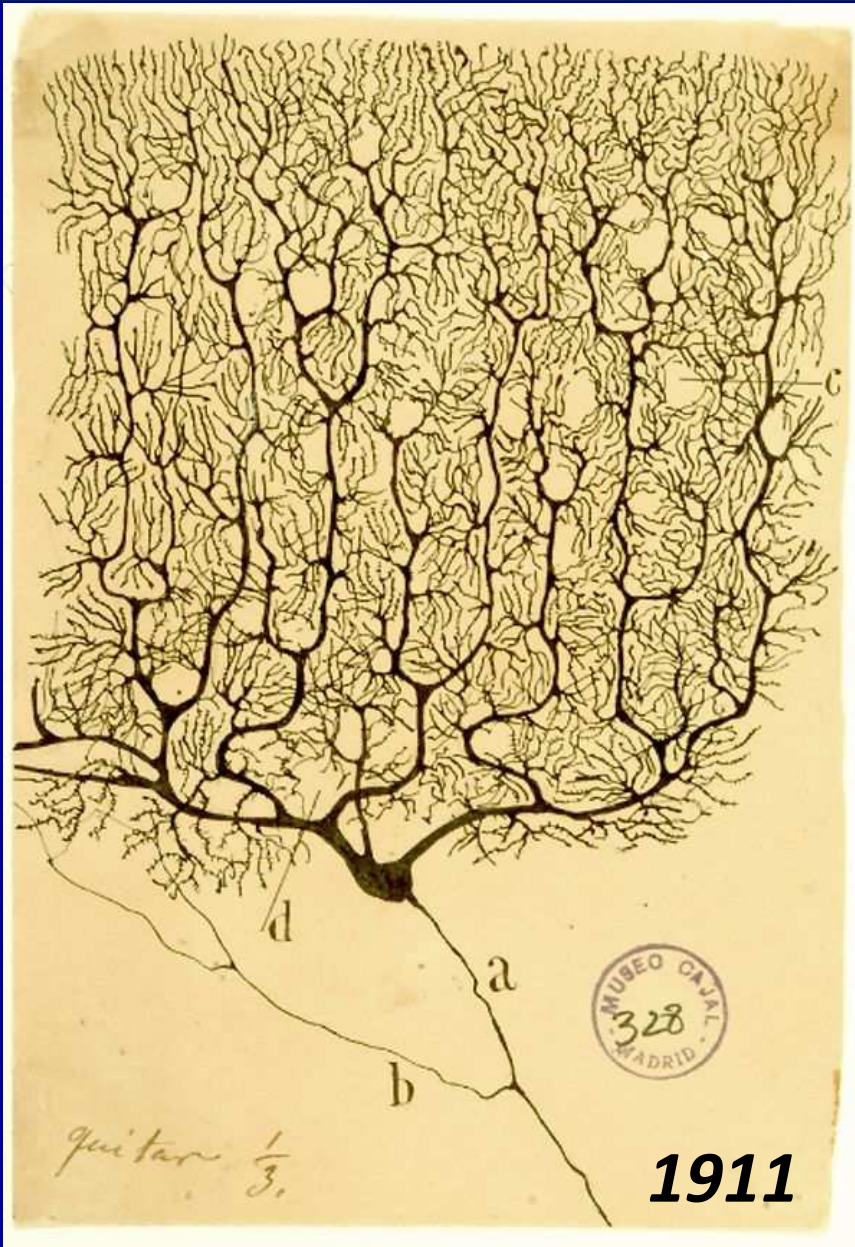


ANTI- PURKINJE CELL AUTOANTIBODIES



ANTI- PURKINJE CELL AUTOANTIBODIES

SOMATA

NUCLEUS

ANNA 3



CYTOPLASM

Yo

PCA2

AP32B

Tr

Ca,Sj

PKCy

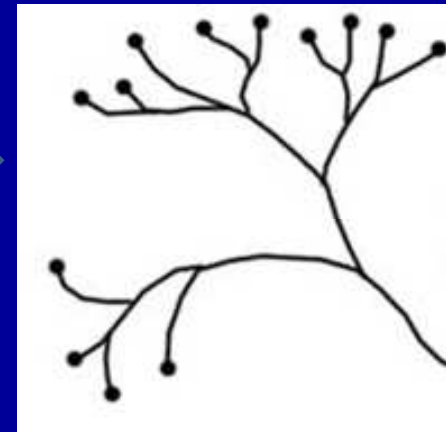
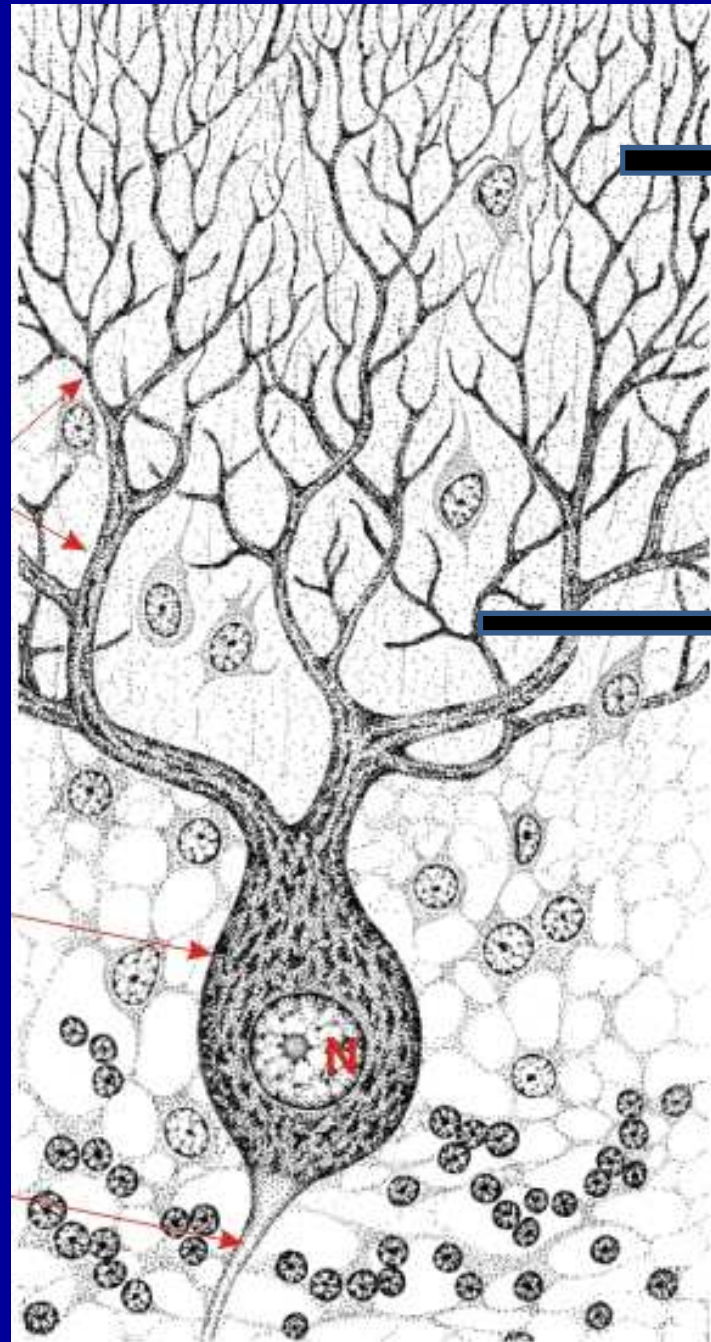
CARP VIII

RL7 2015

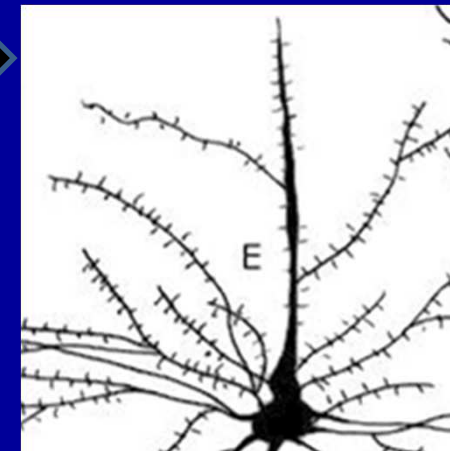
SYNAPTIC TREE

SYNAPTIC TRUNK

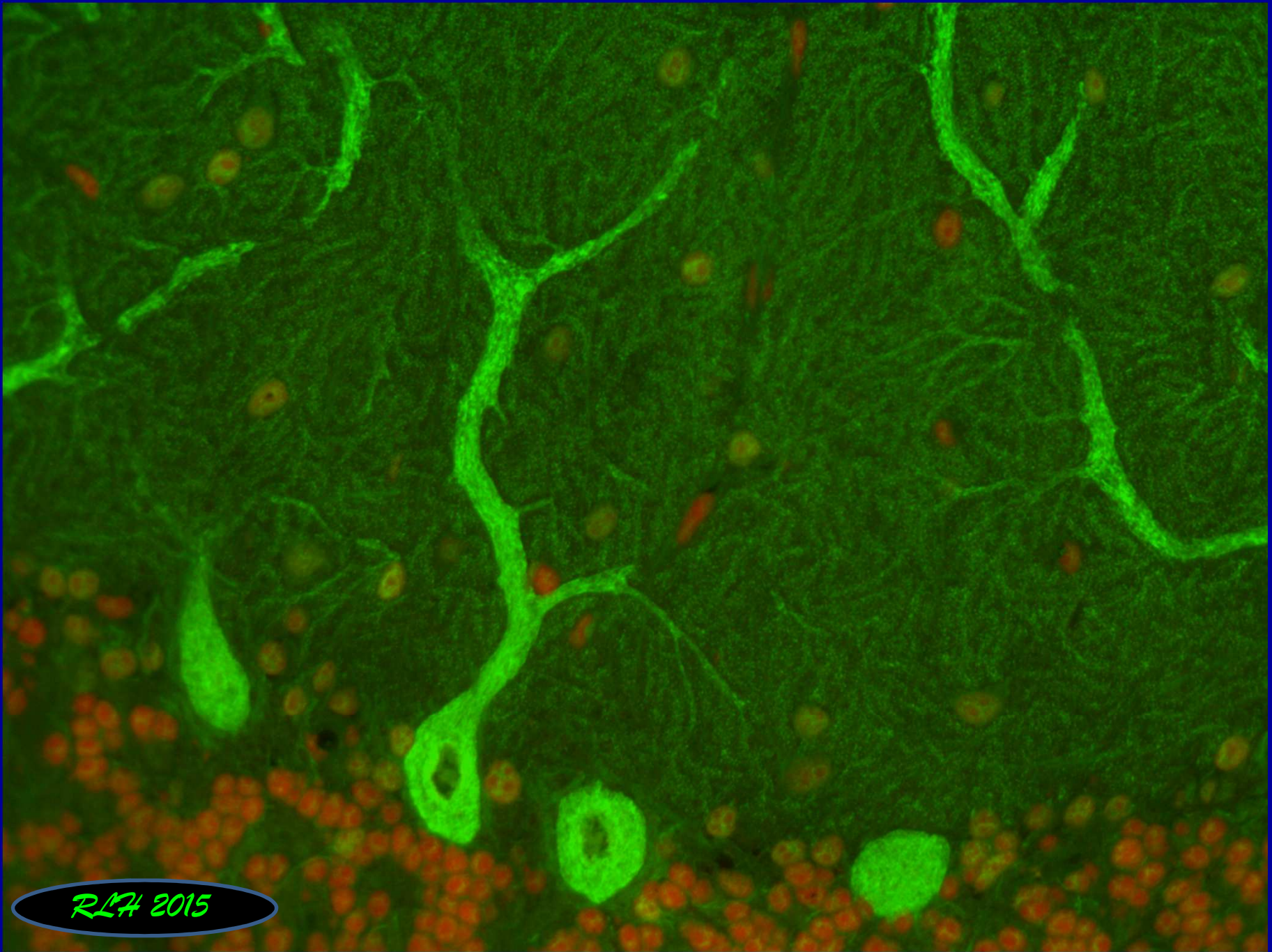
PURKINJE CELL



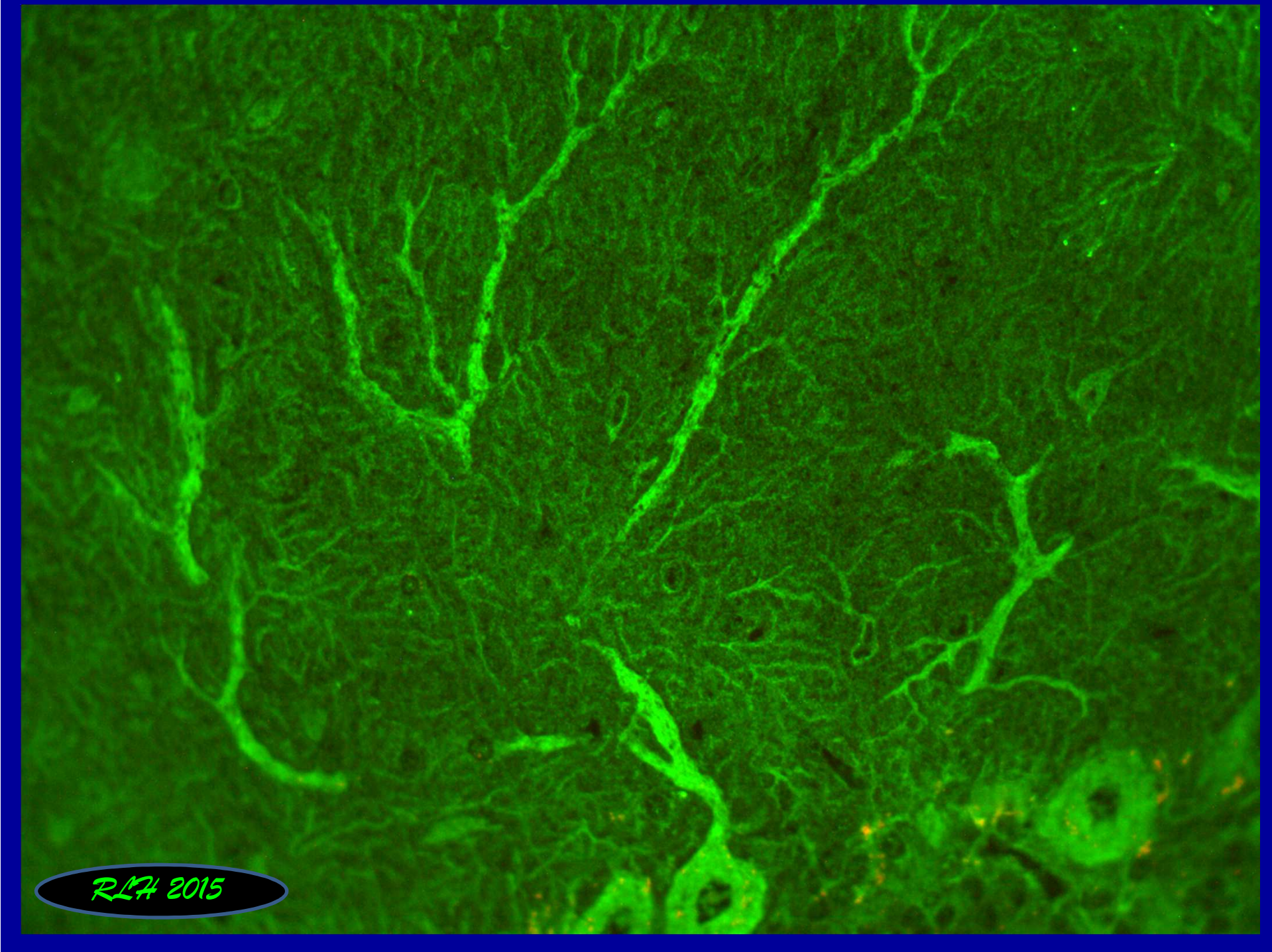
SYNAPTIC BUTTONS



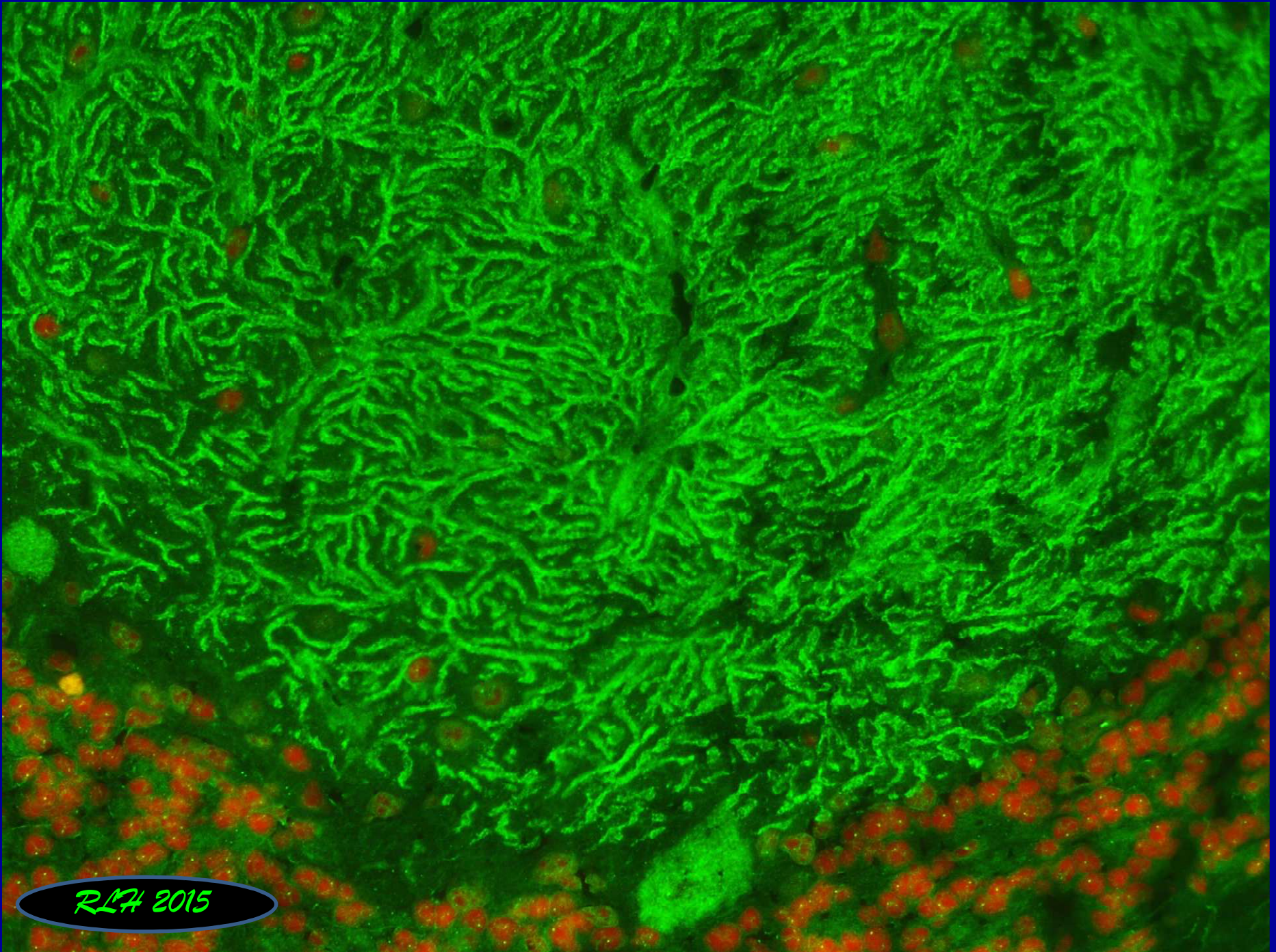
SYNAPTIC SPINES



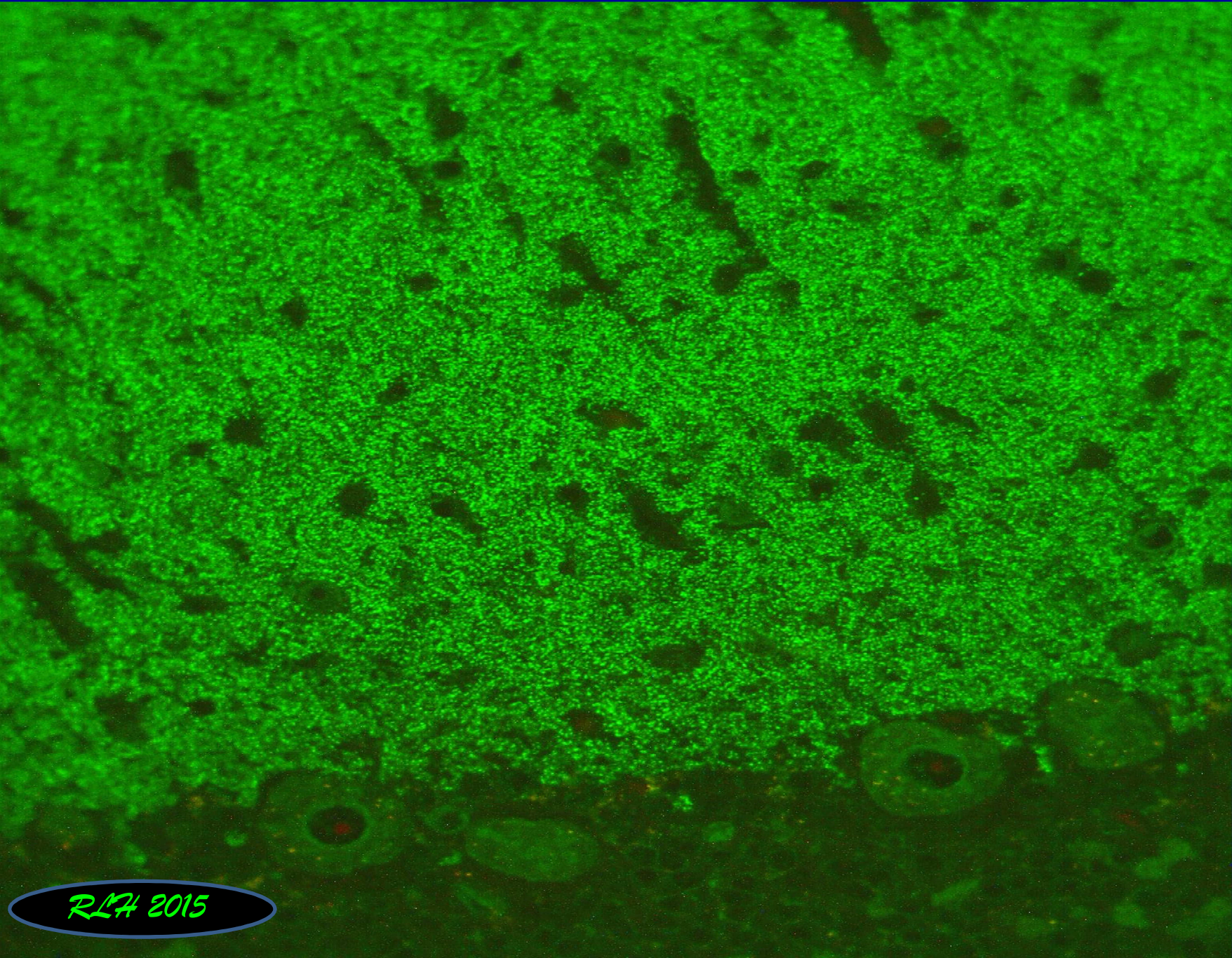
RLH 2015



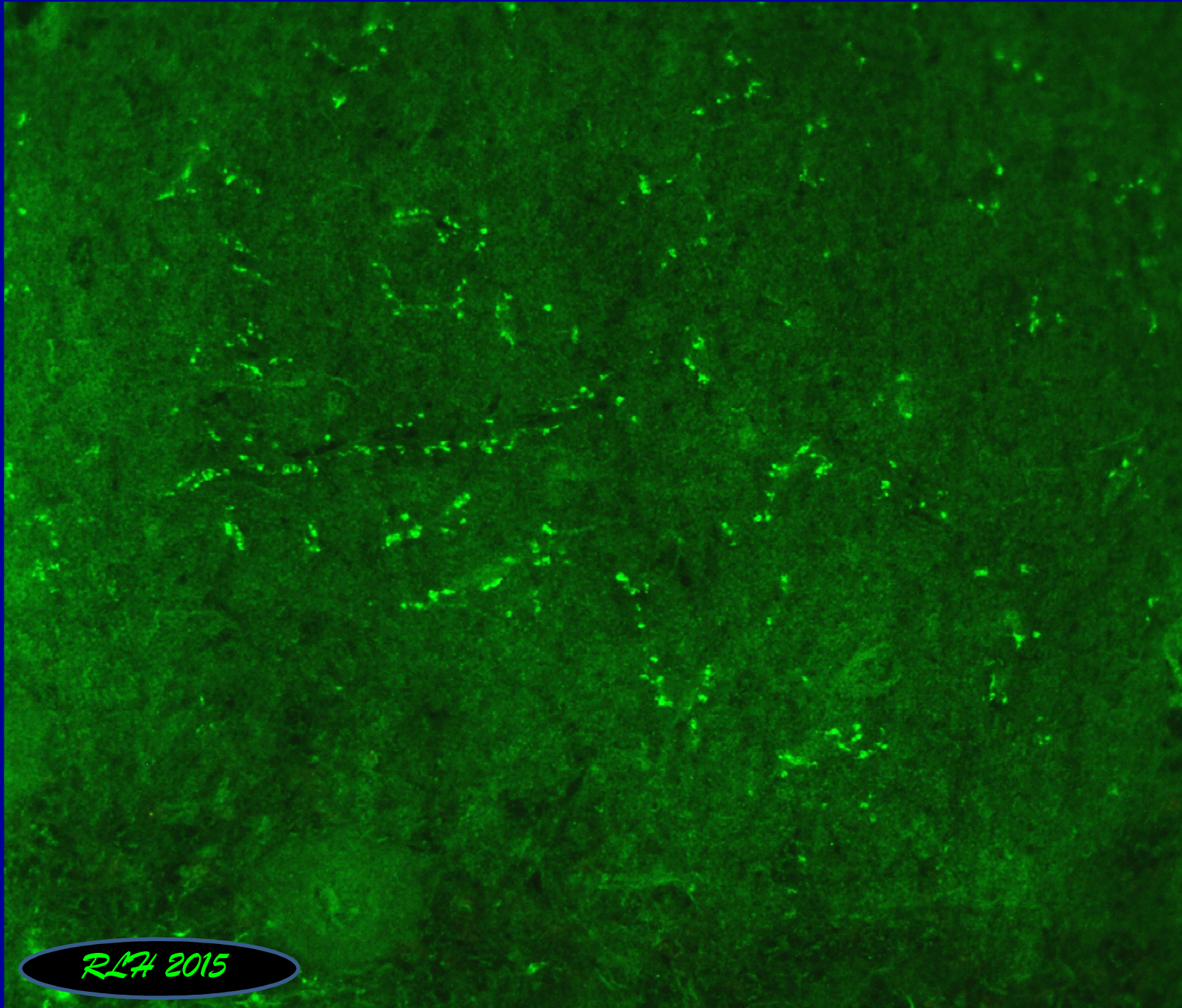
RL7 2015



RL7 2015



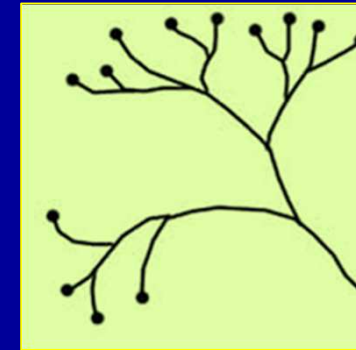
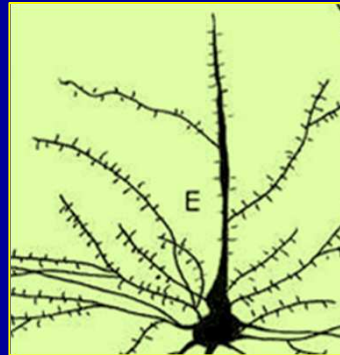
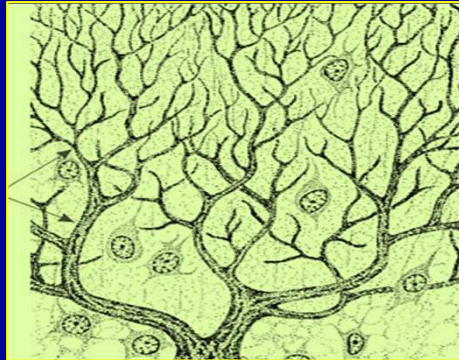
RL7 2015



RLH 2015

MOLECULAR LAYER

DENDRITES PURKINJE CELL



TRUNK

BRANCHES

SPINES

BUTTONS

PCA 2

CARPVIII

Ca,Sj

PKCy

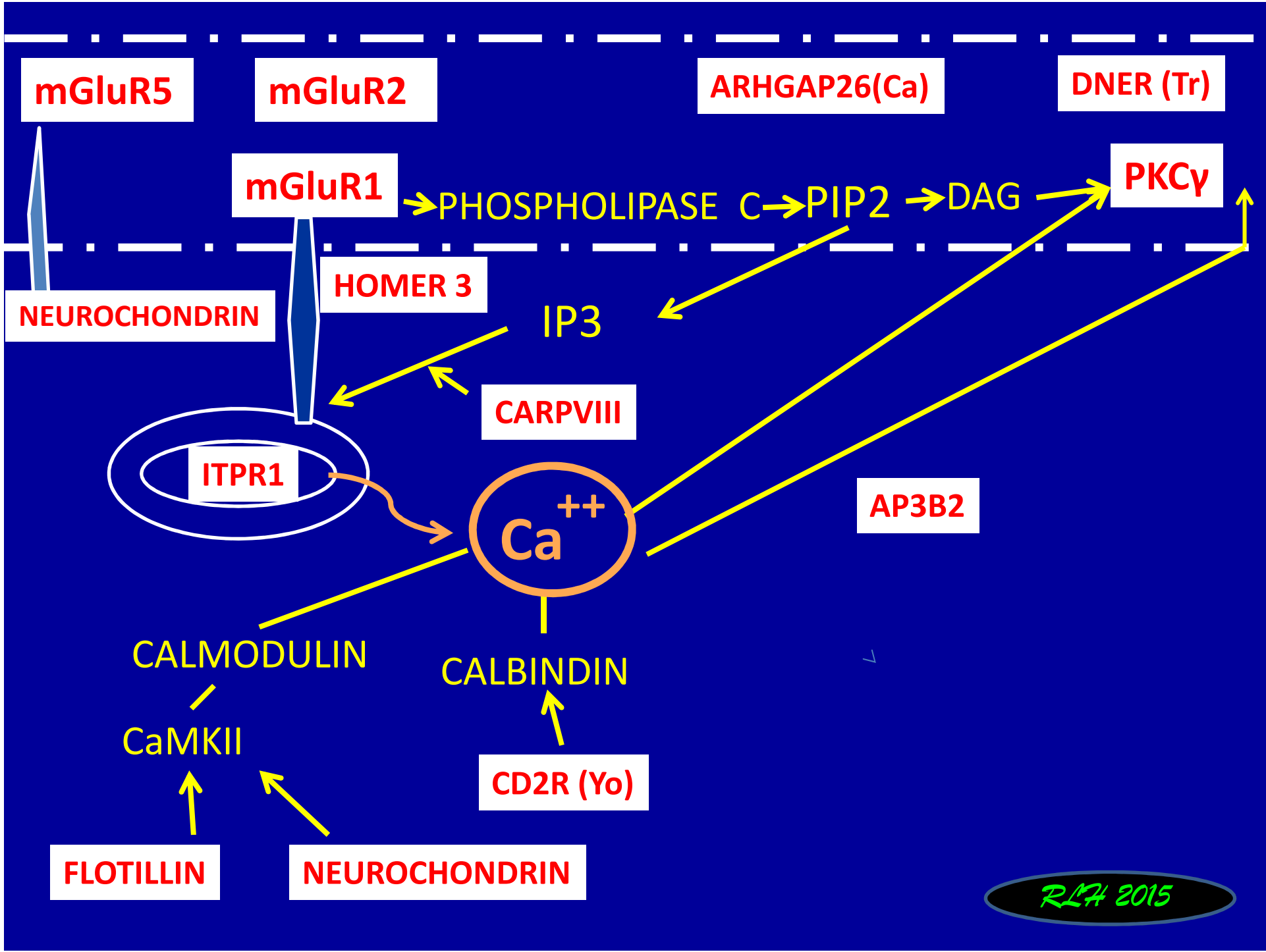
mGluR1/5

Homer

Septin

Tr

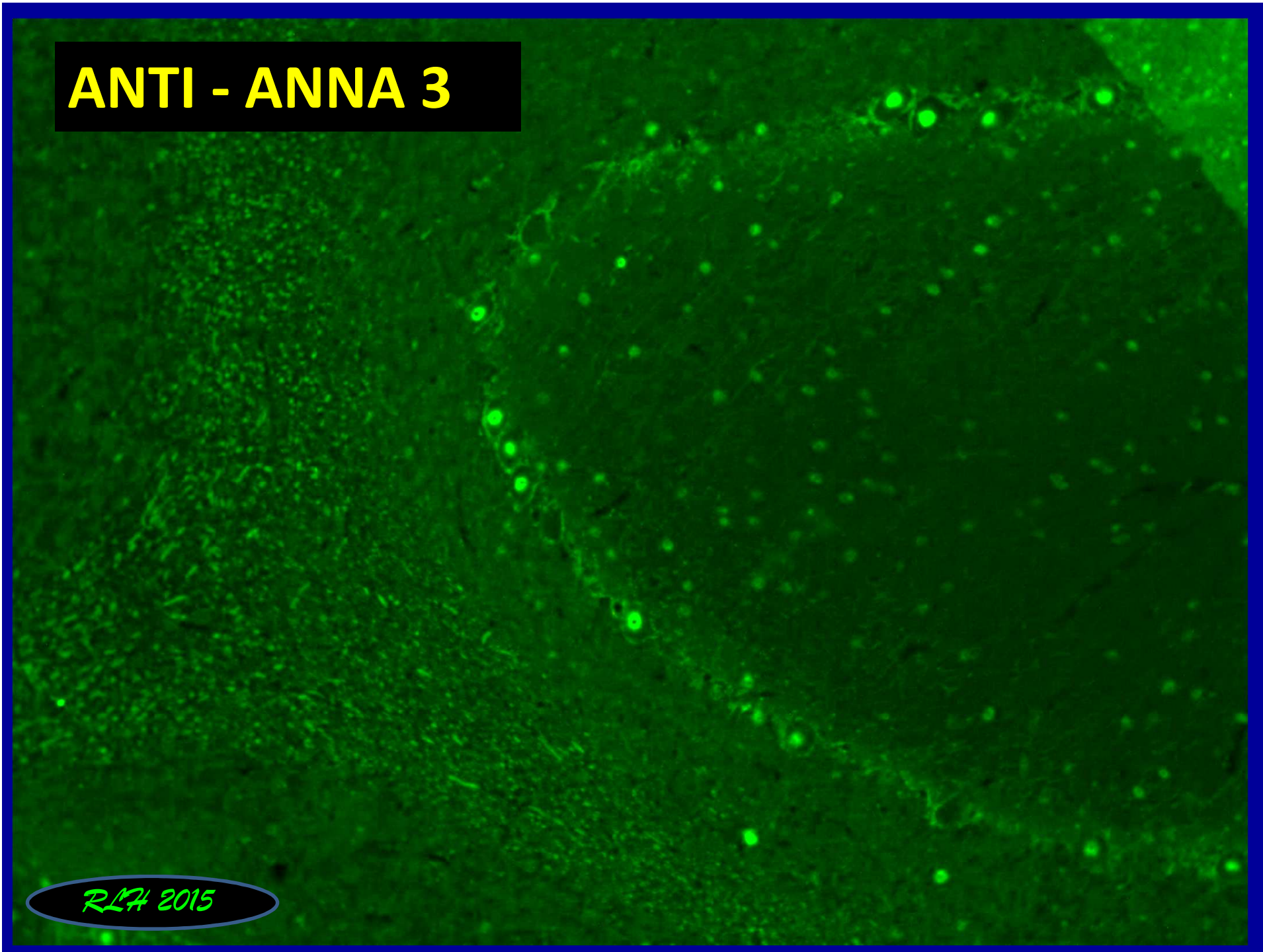
RLH 2015



RL7 2015

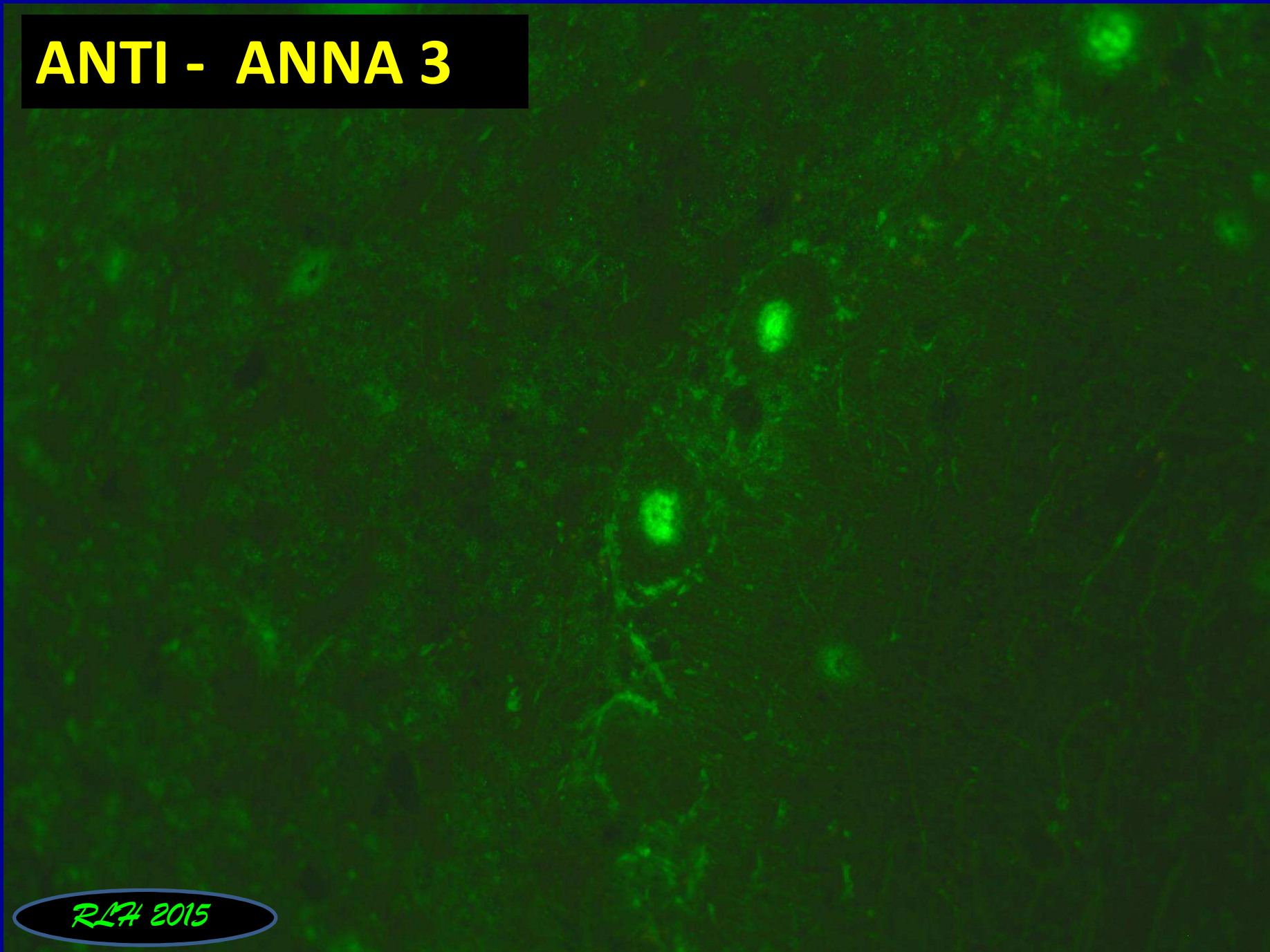
ANTI - ANNA 3

RL7 2015



ANTI - ANNA 3

RL7 2015



ANTI – ANNA 3

LIMBIC ENCEPHALITIS
BRAINSTEM
ENCEPHALITIS
CEREBELLAR ATAXIA
MYELOPATHY

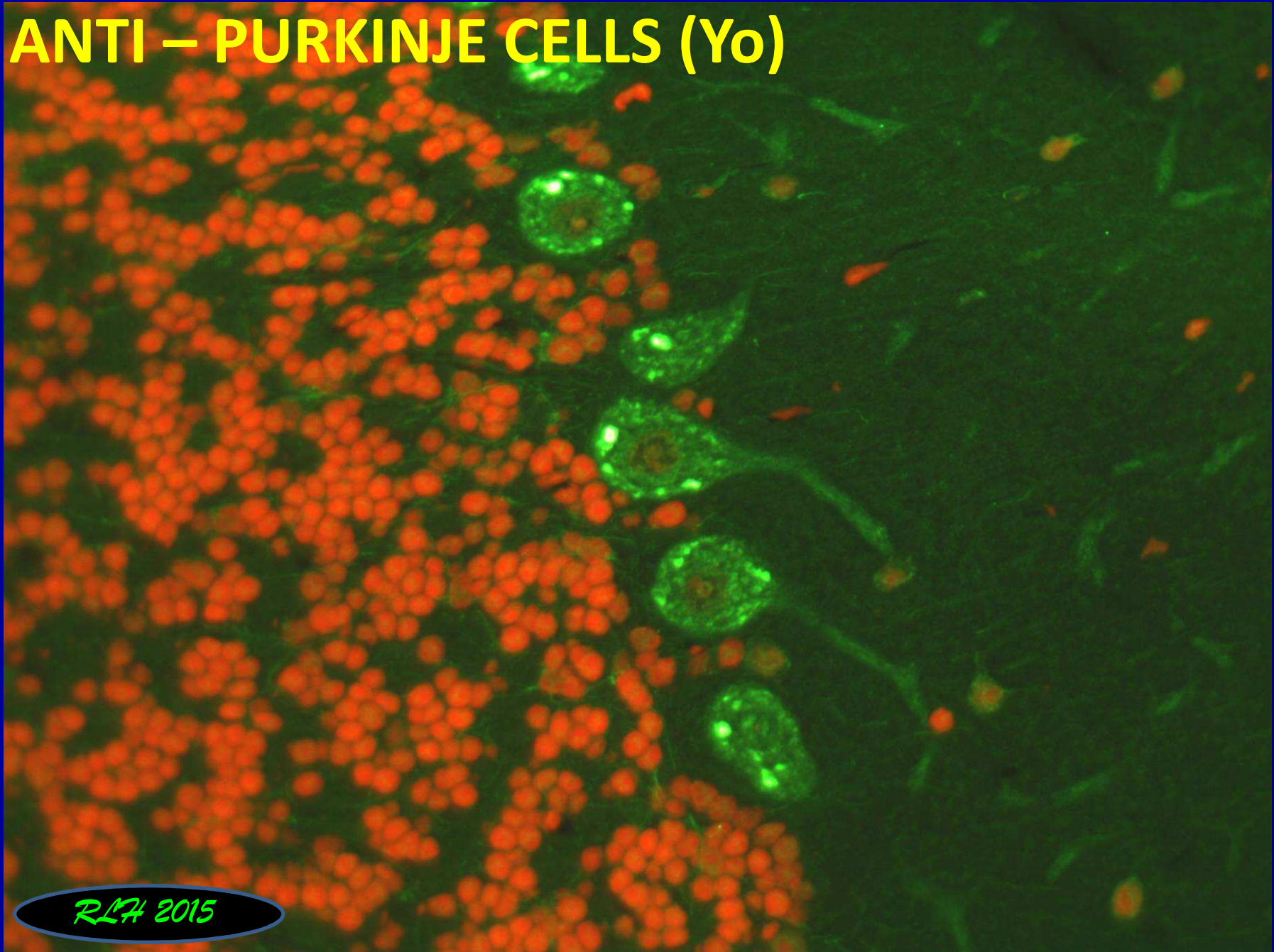
SENSITIVE NEUROPATHY

ANTIGEN ?

SMALL CELL LUNG CARCINOMA

LUNG
ESOPHAGUS

ANTI – PURKINJE CELLS (Yo)



RLH 2015

ANTI – Yo (PCA 1)

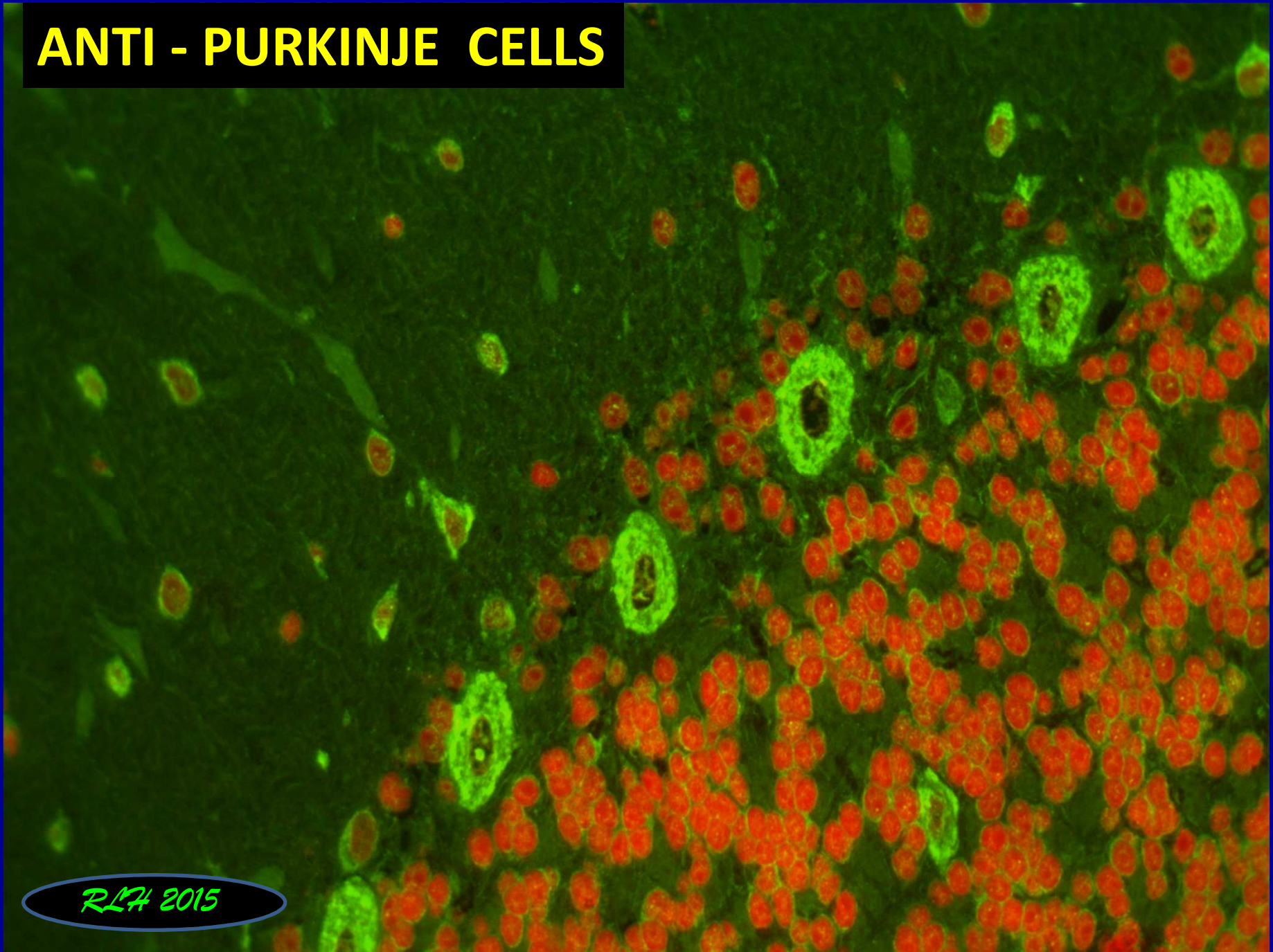
**CYTOPLASM OF
PURKINJE CELLS**

**CEREBELLAR DEGENERATION
ATAXIA
SENSORY NEUROPATHY**

**Yo : Helix-Leucine-Zipper
cdr2 60/62 kD**

GYNECOLOGICAL TUMORS

ANTI - PURKINJE CELLS



RLH 2015

ANTI – Nb/AP3B2

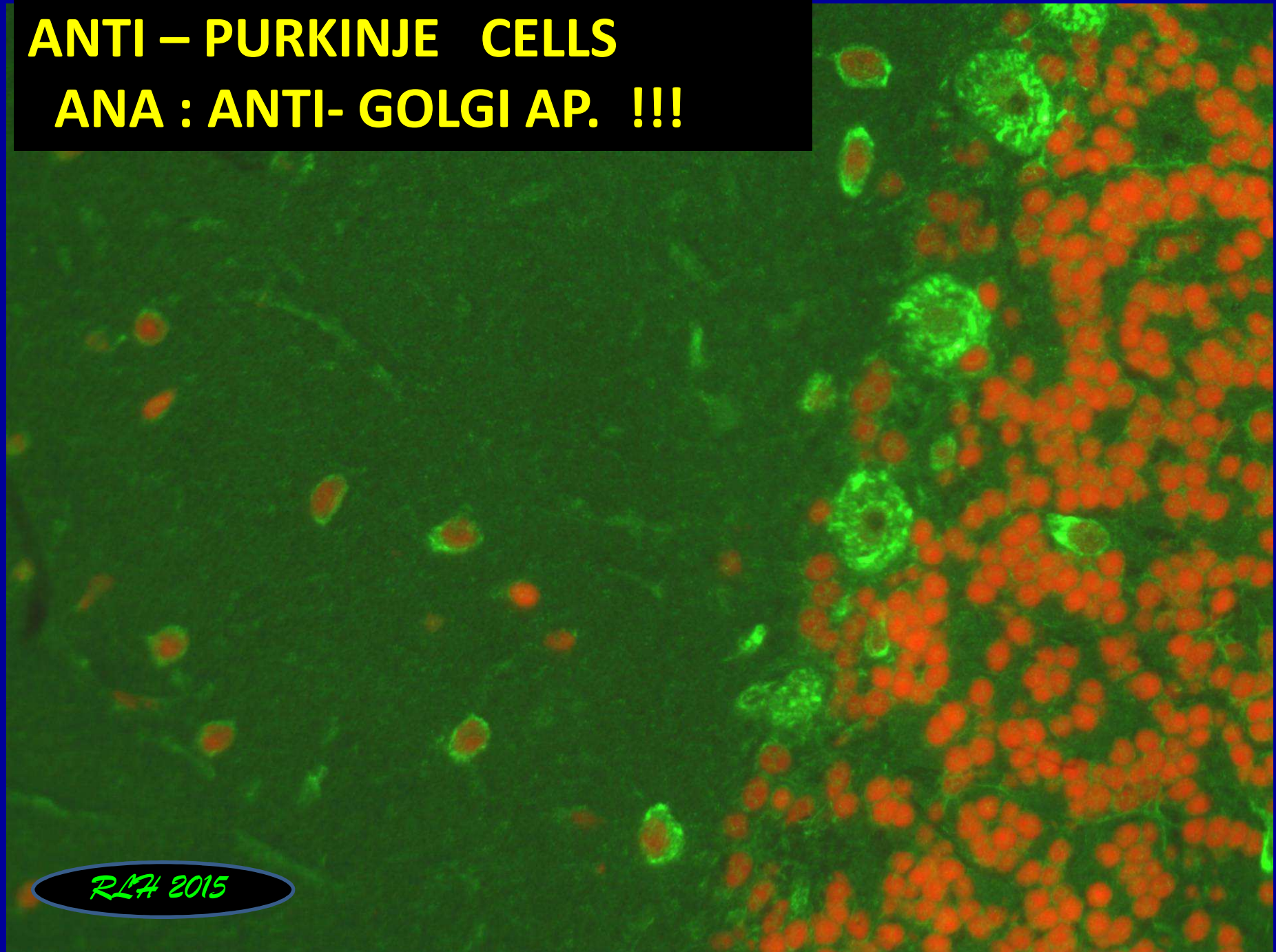
**CYTOPLASM OF
PURKINJE CELLS**
Very fine granular

PANCEREBELLAR SYNDROME
TRUNCAL ATAXIA
HYPERREFLEXIA

NO TUMOUR

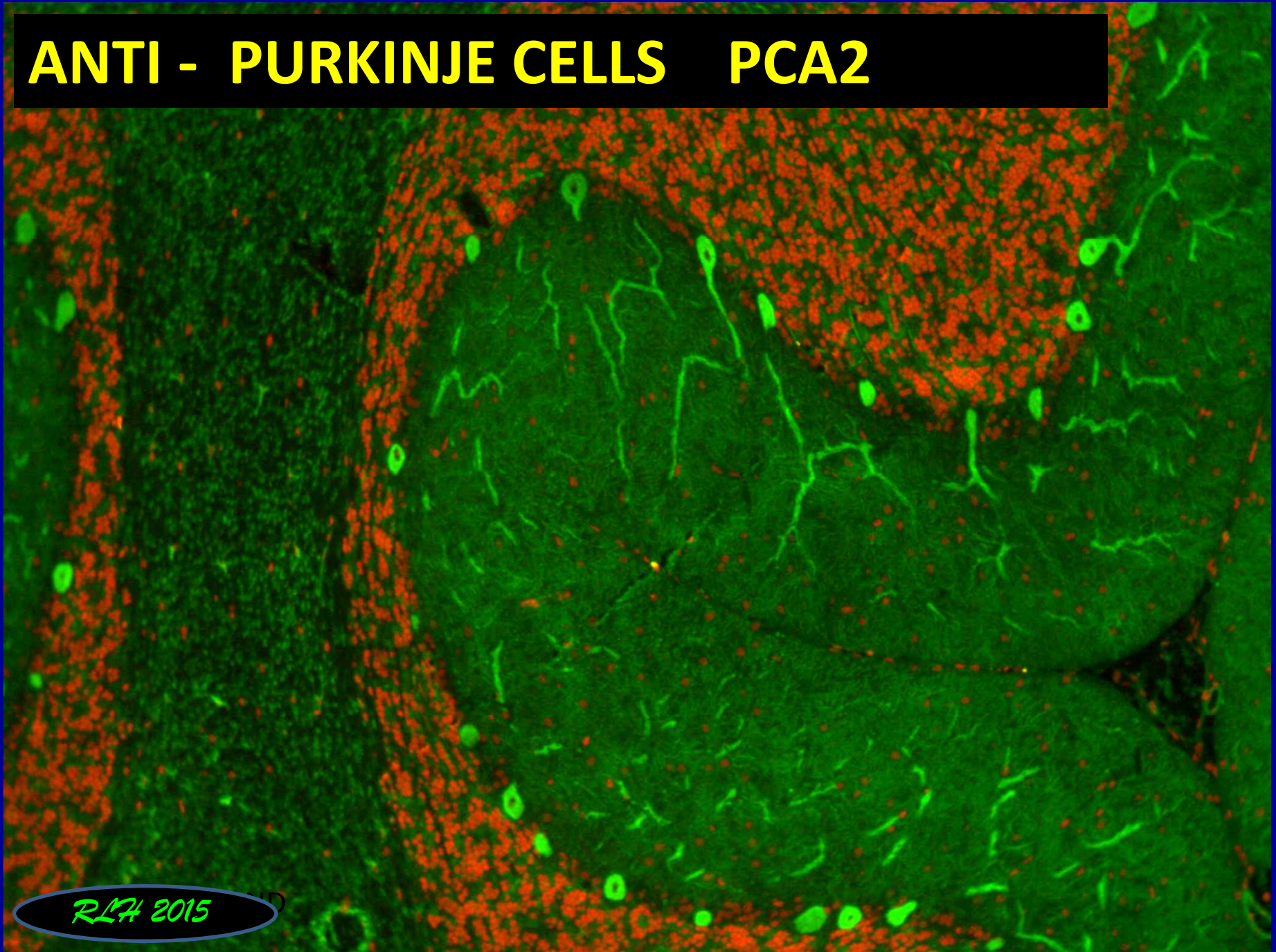
Neuron Specific Adaptin-like Protein
Beta NAP

**ANTI – PURKINJE CELLS
ANA : ANTI- GOLGI AP. !!!**



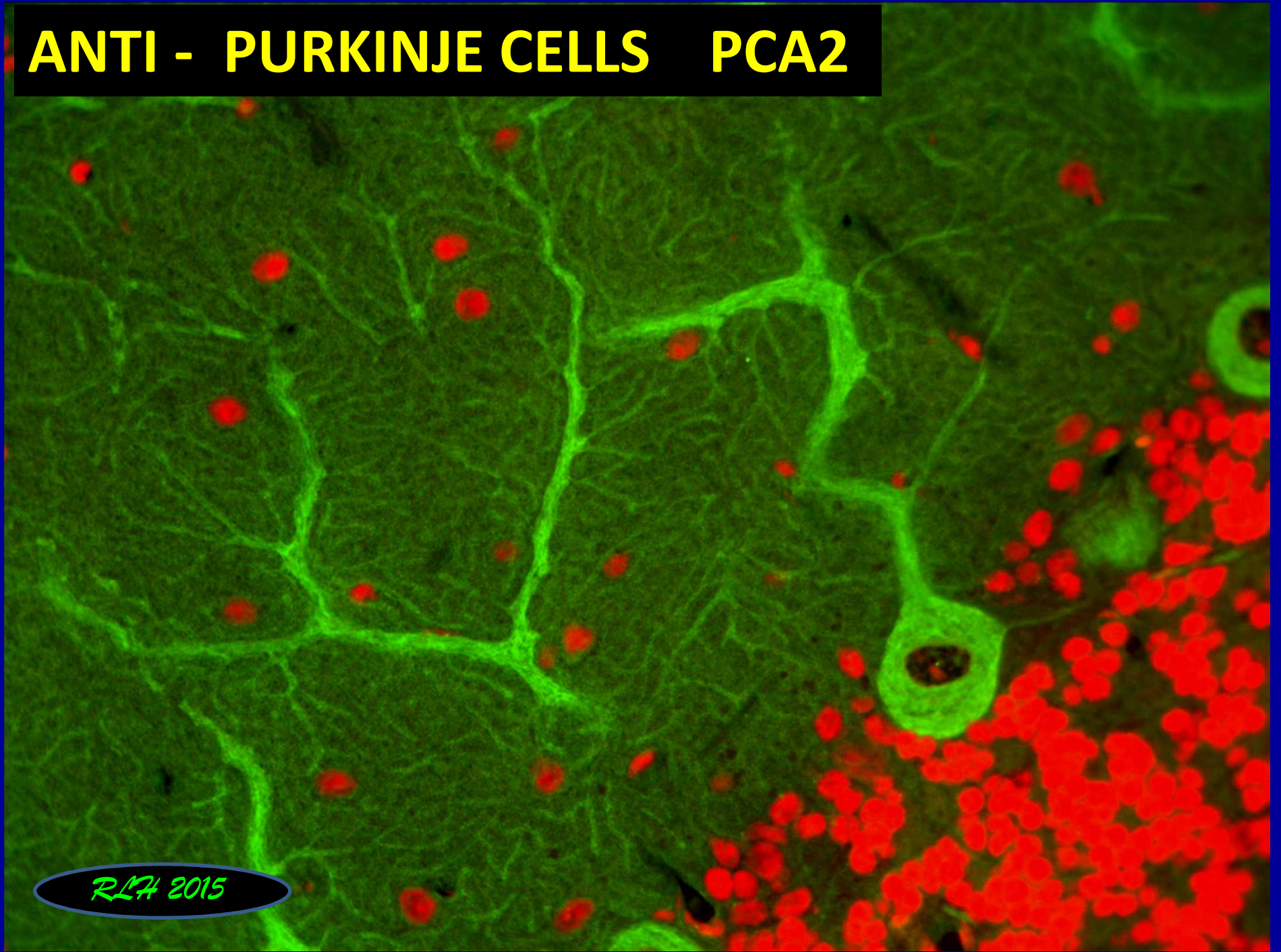
RLH 2015

ANTI - PURKINJE CELLS PCA2



RLH 2015

ANTI - PURKINJE CELLS PCA2



RLH 2015

ANTI – PCA 2

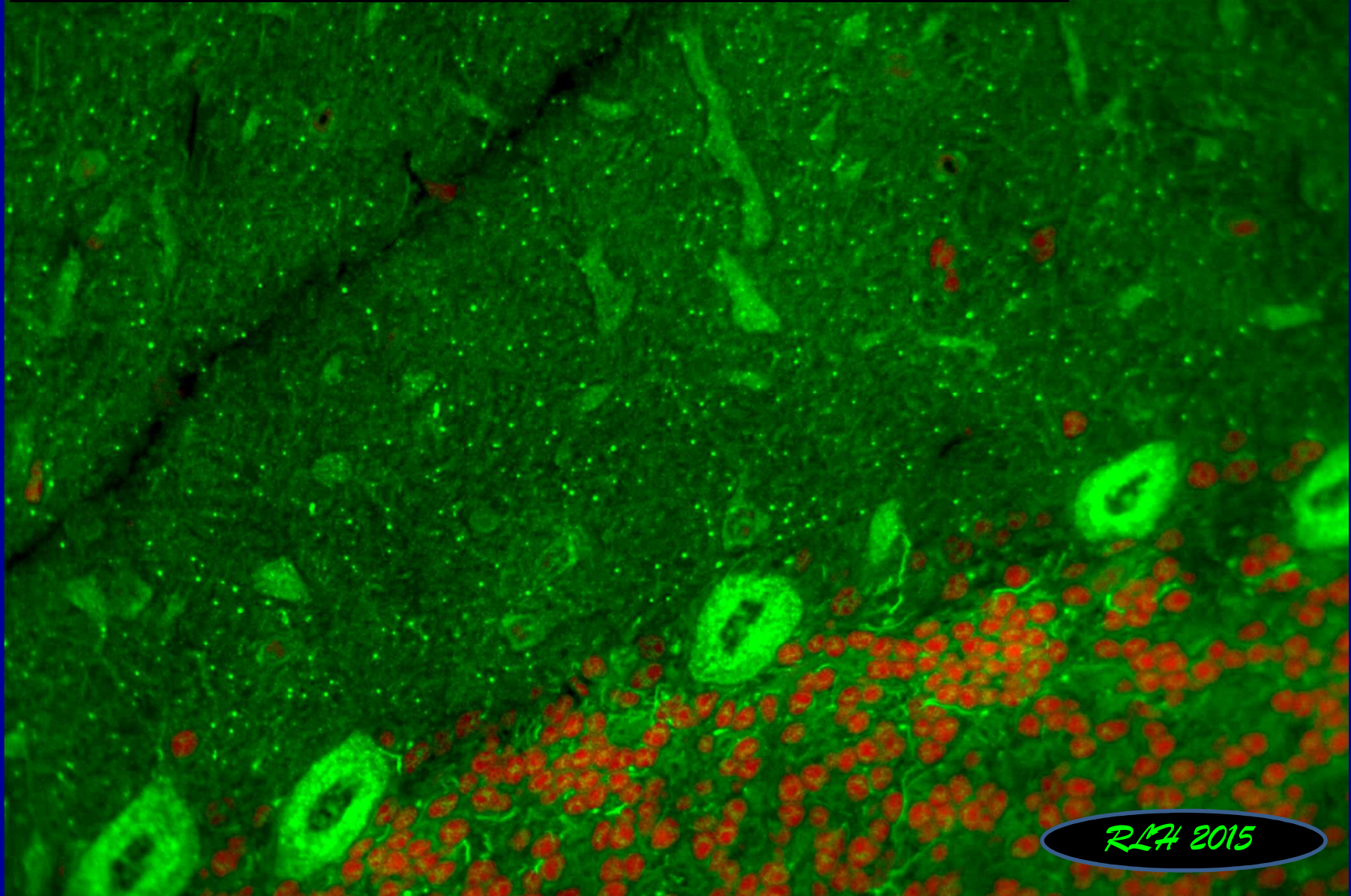
**CYTOPLASM OF
PURKINJE CELLS
SOMATA AND DENDRITES**

PCA 2: ?

**CEREBELLAR DEGENERATION
LIMBIC ENCEPHALITIS
CEREBELLAR ATAXIA
MOTOR NEUROPATHY
AUTONOMIC NEUROPATHY
MYASTHENIC SYNDROME**

**SMALL CELL LUNG
CARCINOMA**

ANTI - PURKINJE CELLS Tr



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ANTI – PCA - Tr

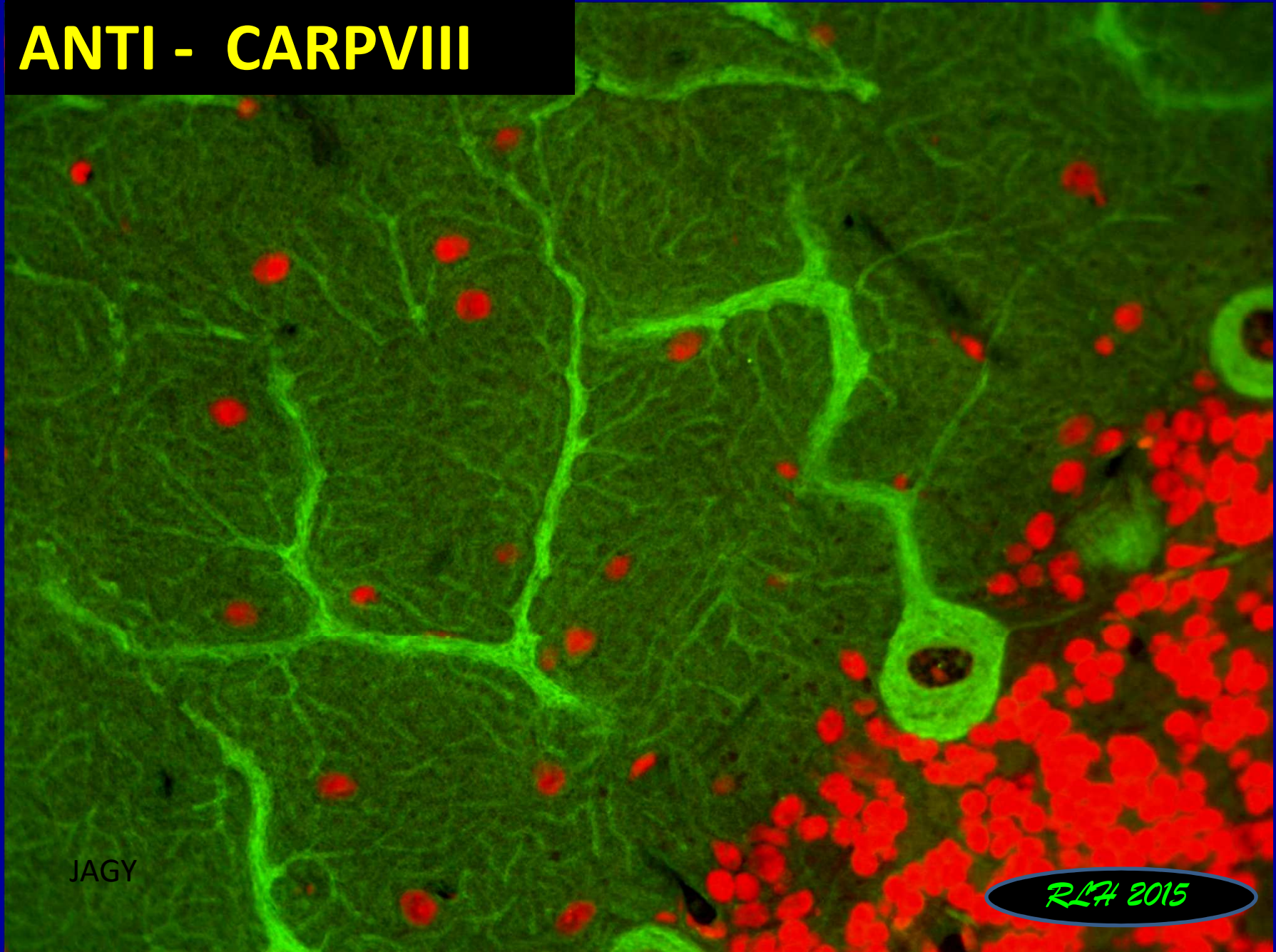
**CYTOPLASM OF
PURKINJE CELLS
SMALL GRANULES IN
THE MOLECULAR LAYER**

**PCA Tr : DNER
Delta/Notch-like Epidermal
Growth Factor-Related
Receptor**

**CEREBELLAR
DEGENERATION
LIMBIC ENCEPHALITIS
ATAXIA**

HODGKIN 'S DISEASE

ANTI - CARPVIII



JAGY

R17 2015

ANTI - CARP VIII

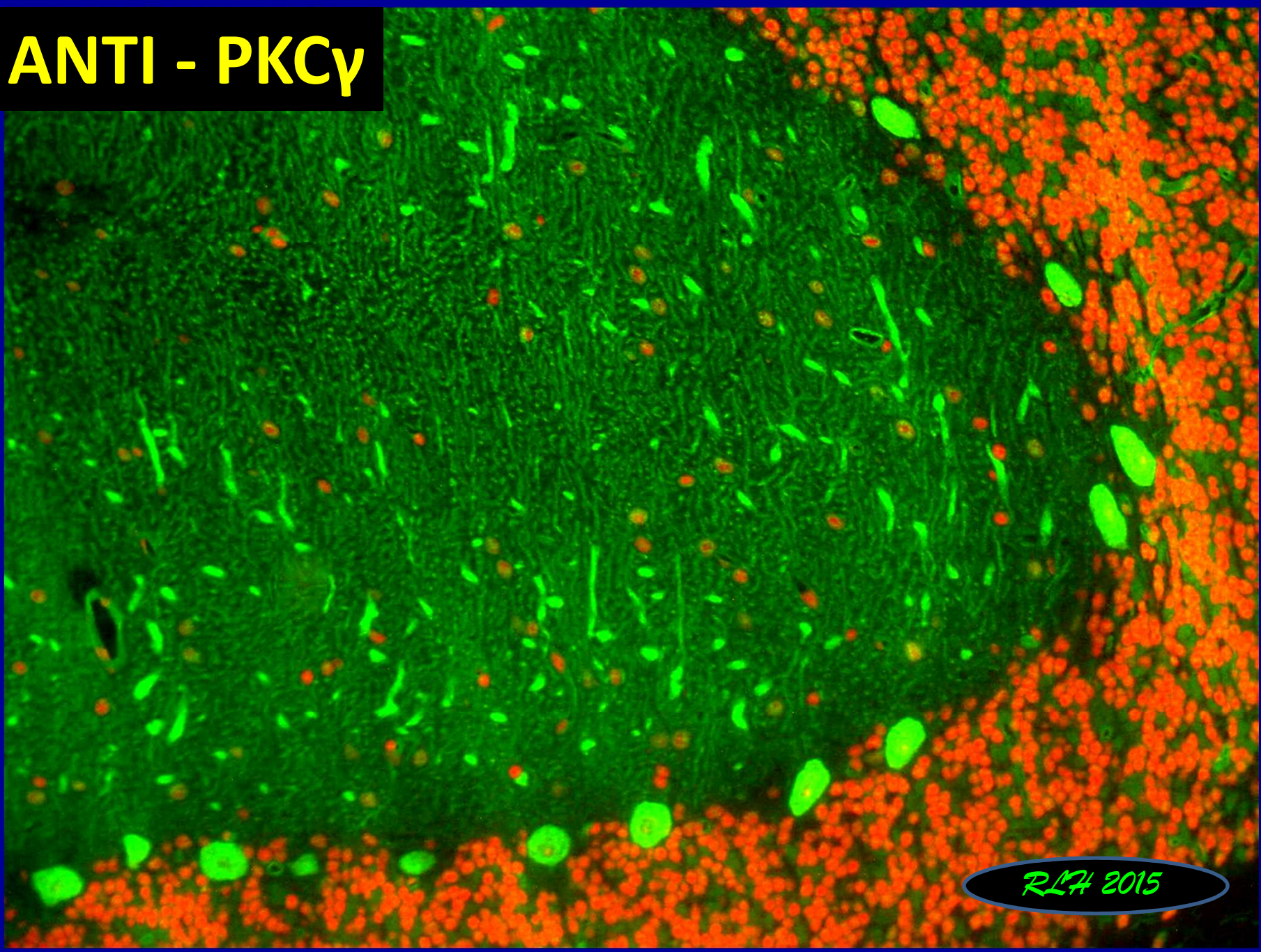
PURKINJE CELLS
CYTOPLASM
DENDRITES
AXONS

**Carbonic Anhydrase -
related Protein VIII**

Severe Gait Ataxia
Vertigo
Dysarthria
Nystagmus

Melanoma
Ovarian Carcinoma

ANTI - PKC γ



R17 2015

ANTI-PKC γ

**CYTOPLASM OF
PURKINJE CELLS**

Dendrites

Axons in White Matter

CEREBELLAR DEGENERATION

GAIT, LIMB ATAXIA

VERTIGO

DYSARTHRIA

Protein-Kinase γ

HEPATOBIILIARY ADENOCARCINOMA

MELANOMA

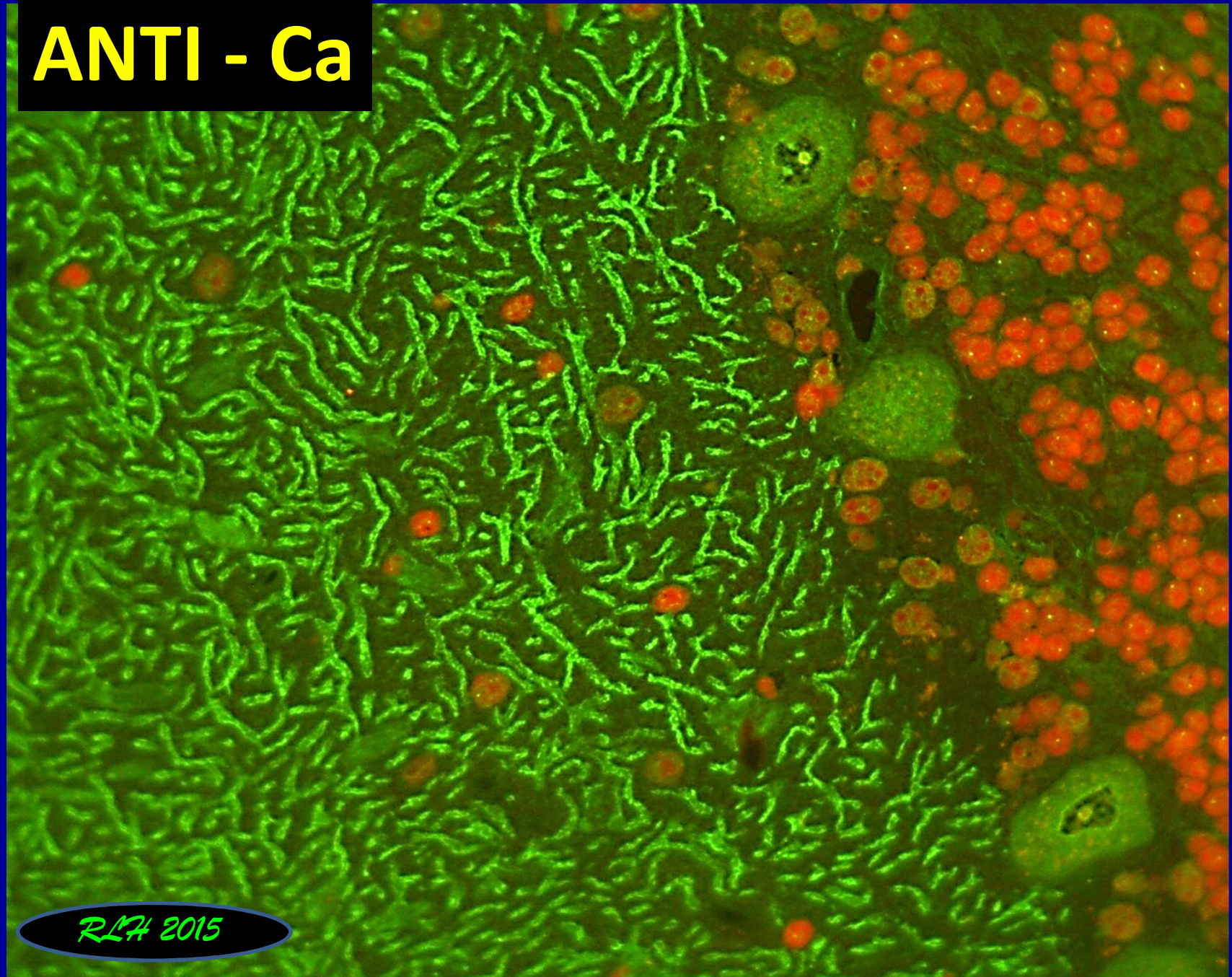
OVARIAN ADENOCARCINOMA

ANTI -Ca



RLH 2015

ANTI - Ca



RLH 2015

ANTI-Ca

**CYTOPLASM OF
PURKINJE CELLS**

**Dendritic Branches, Spines
Axons in White Matter**

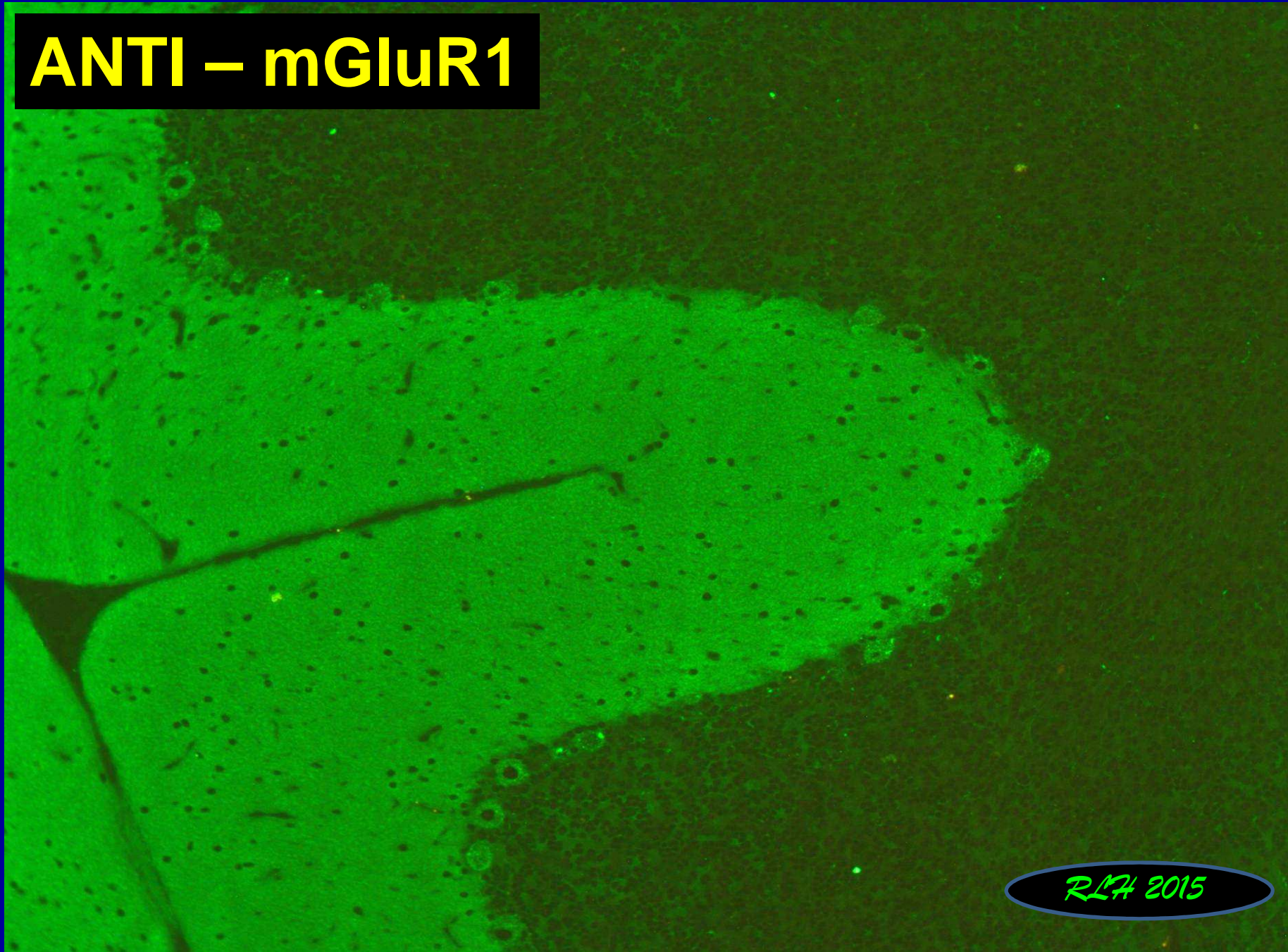
**SEVERE CEREBELLAR ATAXIA
NYSTAGMUS, DYSARTHRIA**

**PSYCHOTIC SYNDROME
COGNITIVE DECLINE
MEMORY LOSS**

**rhoGTPase Activating-Protein
ARHGAP 26**

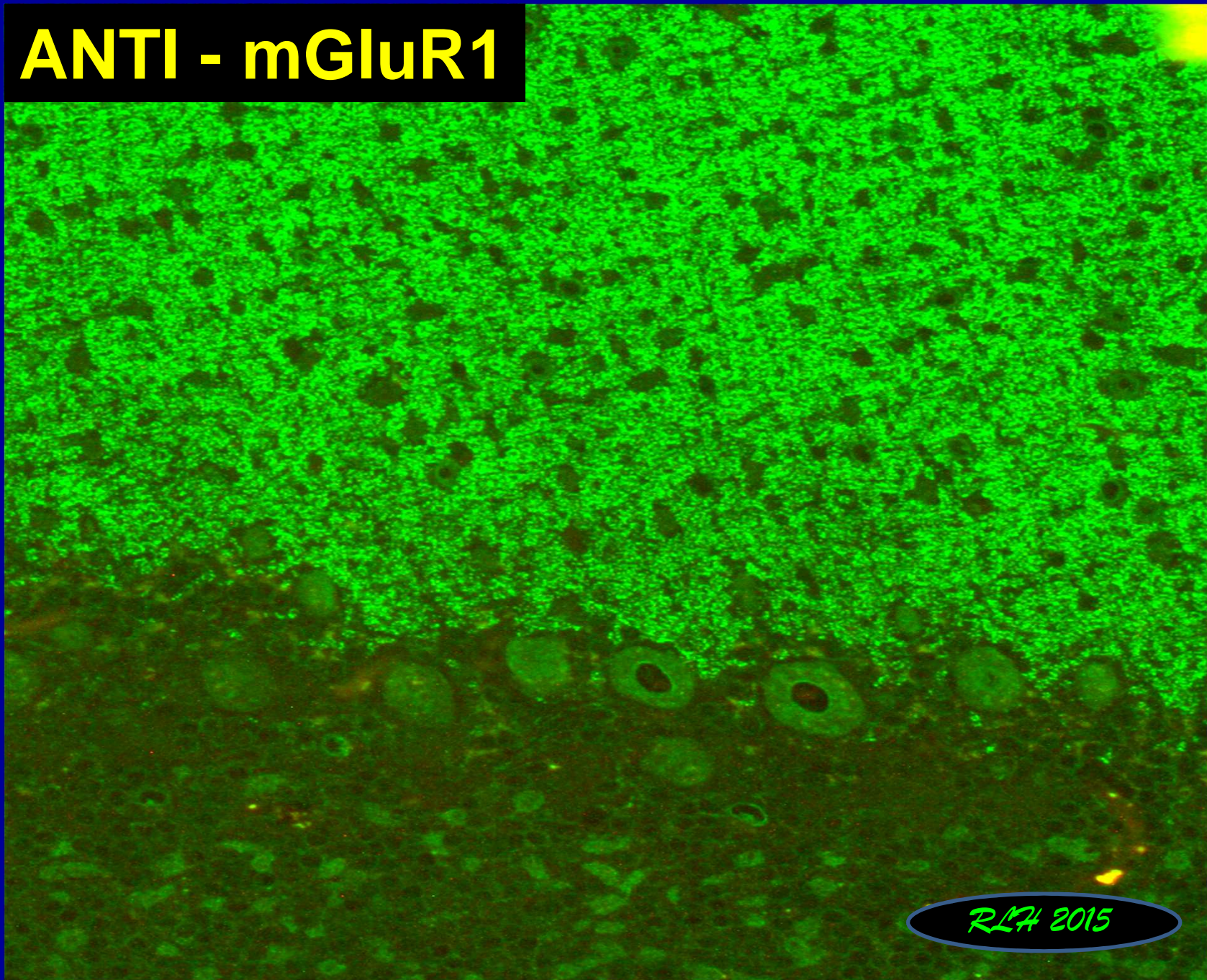
**OVARIAN CANCER , 1 Case
NO TUMOUR**

ANTI – mGluR1



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ANTI - mGluR1



RL7 2015

ANTI-mGLUR 1 ANTIBODIES

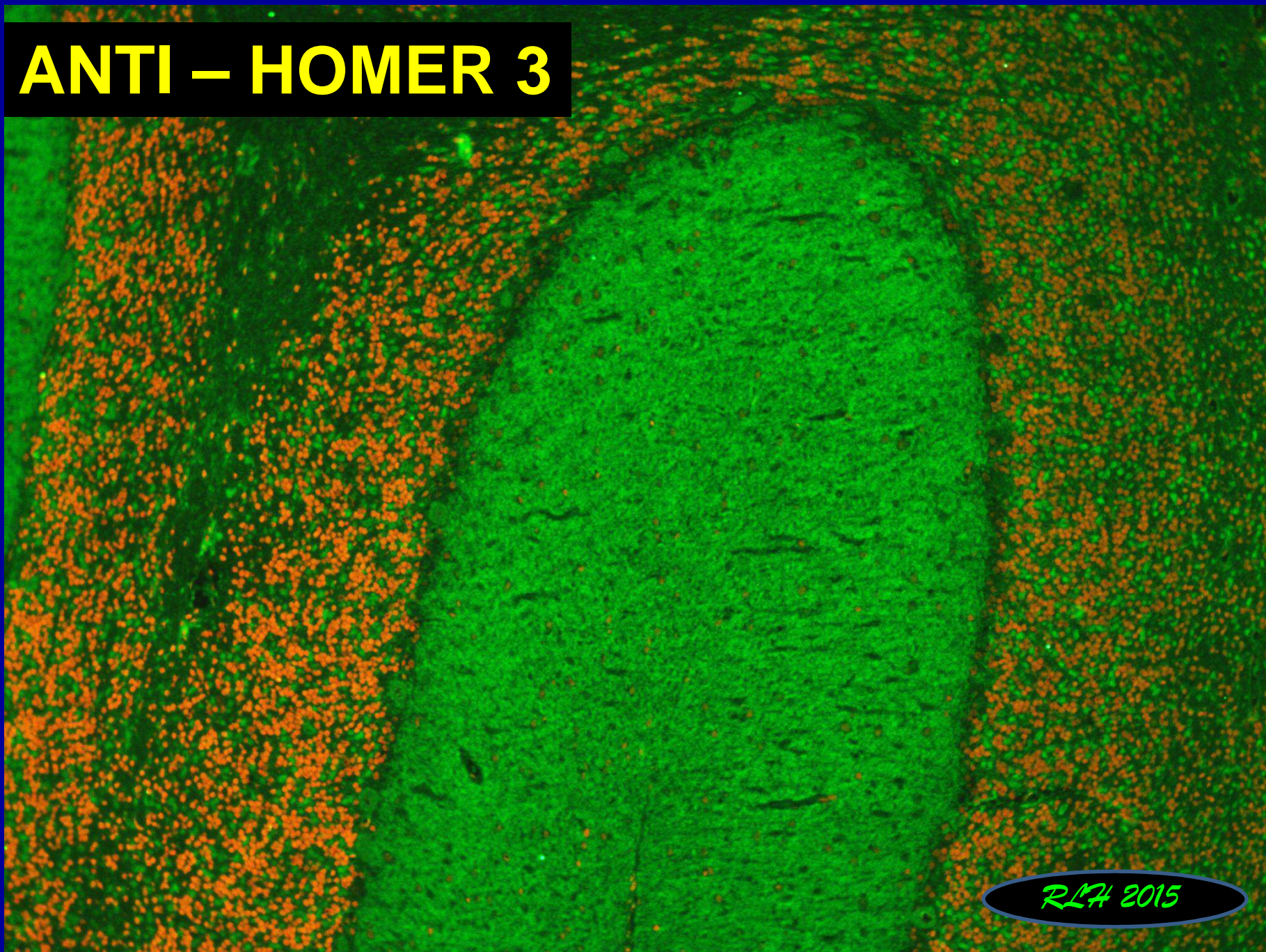
PURKINJE CELL CYTOPLASME
SPINES IN MOLEC. LAYER
Punctate Staining ++

Metabotropic Glutamate
Receptor GluR1a

CEREBELLAR GAIT ATAXIA
LIMB ATAXIA
TRUNK ATAXIA
NYSTAGMUS

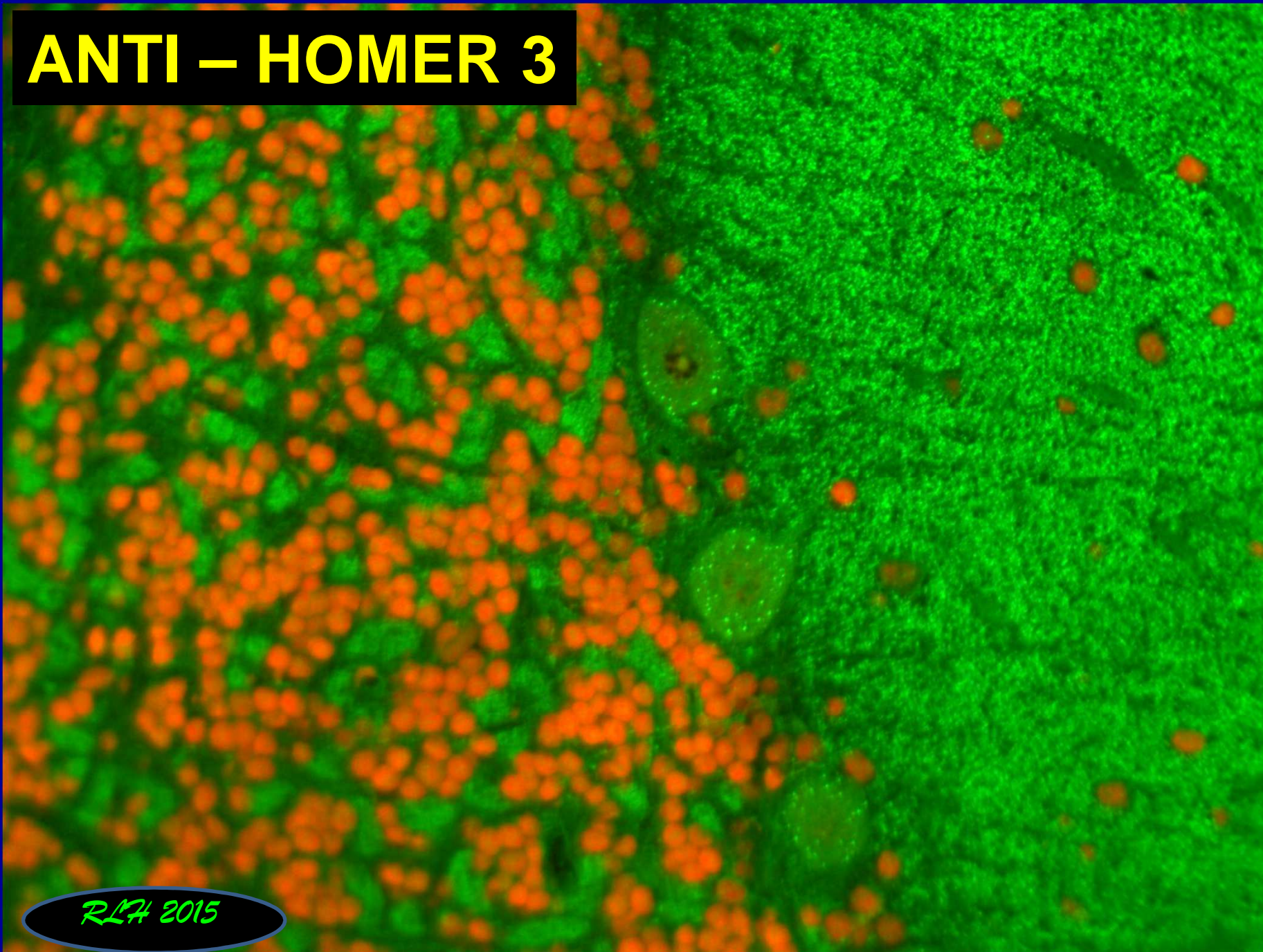
HODGKIN LYMPHOMA
No TUMOR

ANTI – HOMER 3



RL7 2015

ANTI – HOMER 3



RL7 2015

ANTI – HOMER-3 ANTIBODIES

PURKINJE CELL CYTOPLASME
SPINES IN MOLECUL. LAYER
Punctate Staining ++

HOMER-3

**NYSTAGMUS
NAUSEA,VOMITING
DYSARTHRIA**

**CEREBELLAR ATAXIA
CEREBELLITIS**

**Lung Cancer (1 case)
NO TUMOUR**

ANTI – SEPTIN ANTIBODIES

PURKINJE CELL CYTOPLASM
SPINES IN MOLECUL. LAYER
Punctate Staining ++

SEPTIN COMPLEX

CEREBELLAR ATAXIA

MELANOMA

ANTI – mGluR5

RLH 2015

ANTI – mGluR5 ANTIBODIES

PURKINJE CELL CYTOPLASME
SPINES IN MOLECUL. LAYER
Punctate Staining ++

mGluR5
NEUROCHONDRIN ?

OPHELIA SYNDROME
Subacute

Memory Loss
Depression
Hallucinations

HODGKIN LYMPHOMA

ANTI – GluRδ2



RLH 2015

ANTI – GluRδ2

RLH 2015

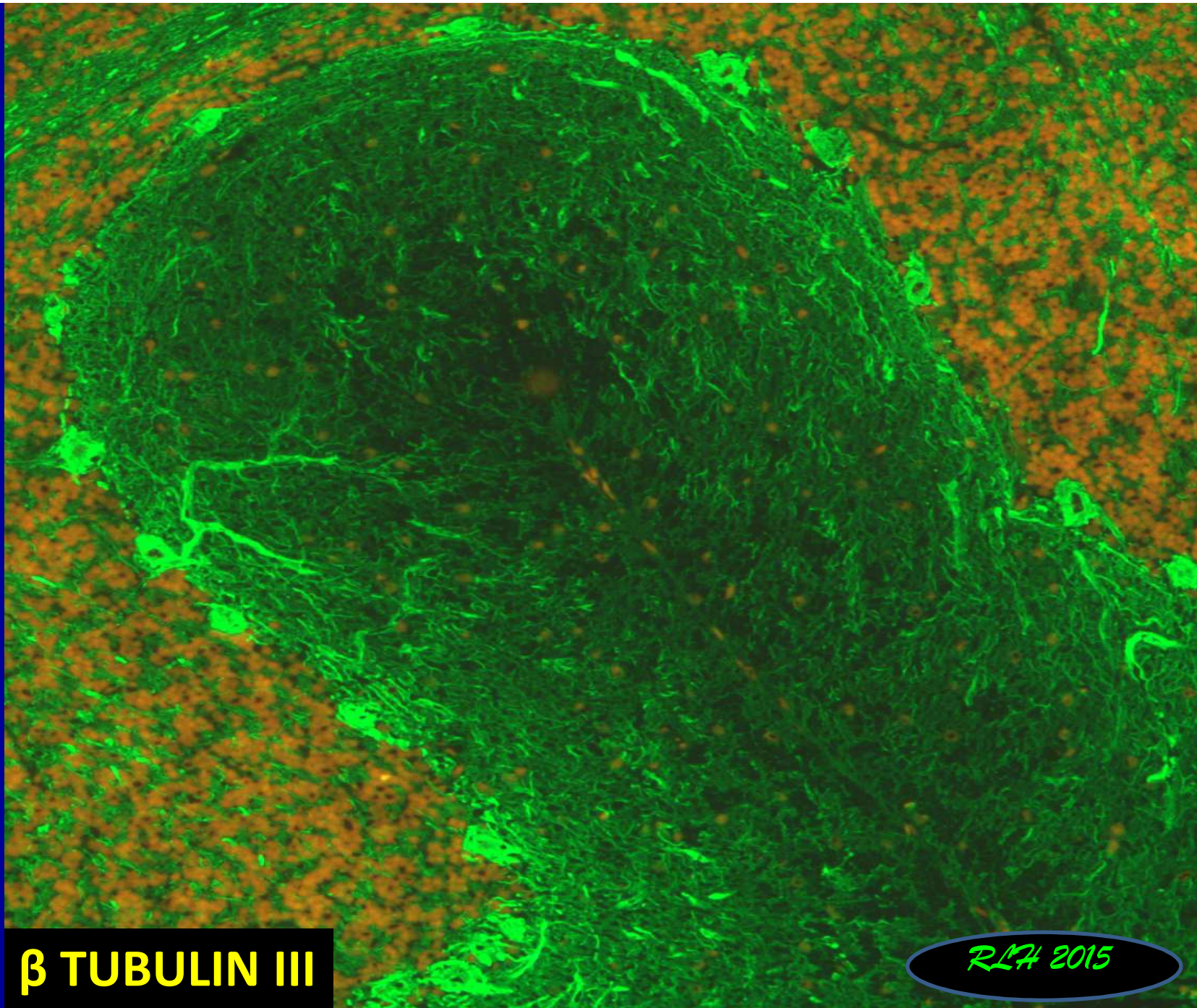
ANTI –GluRδ2 ANTIBODIES

**PURKINJE CELL CYTOPLASME
SPINES IN MOLEC. LAYER
Punctate Staining ++**

Glutamate Receptor delta 2

**CEREBELLAR ATAXIA
DYSMETRIA
TREMOR
MUSCULAR HYPOTONIA**

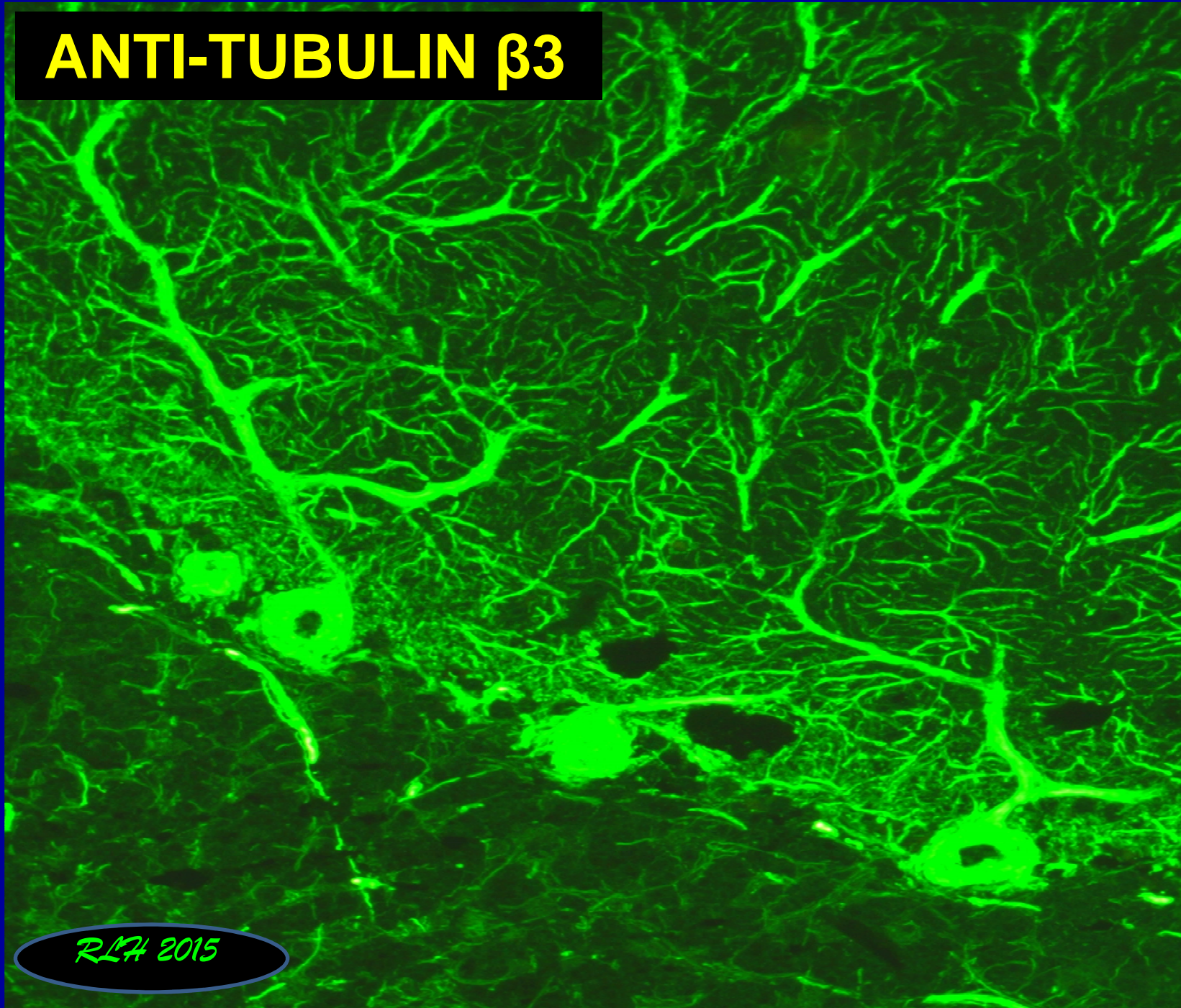
No TUMOR



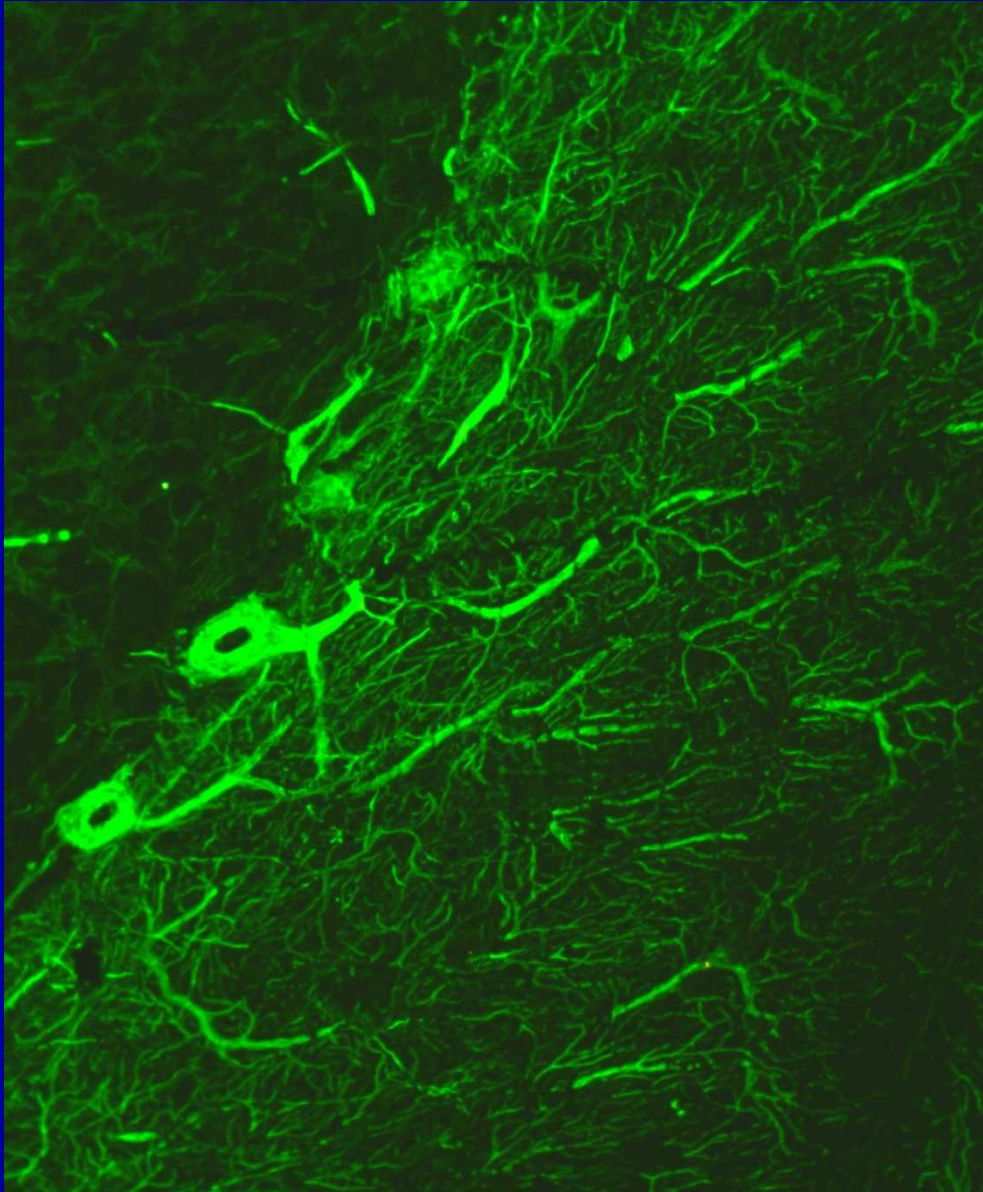
β TUBULIN III

RL7 2015

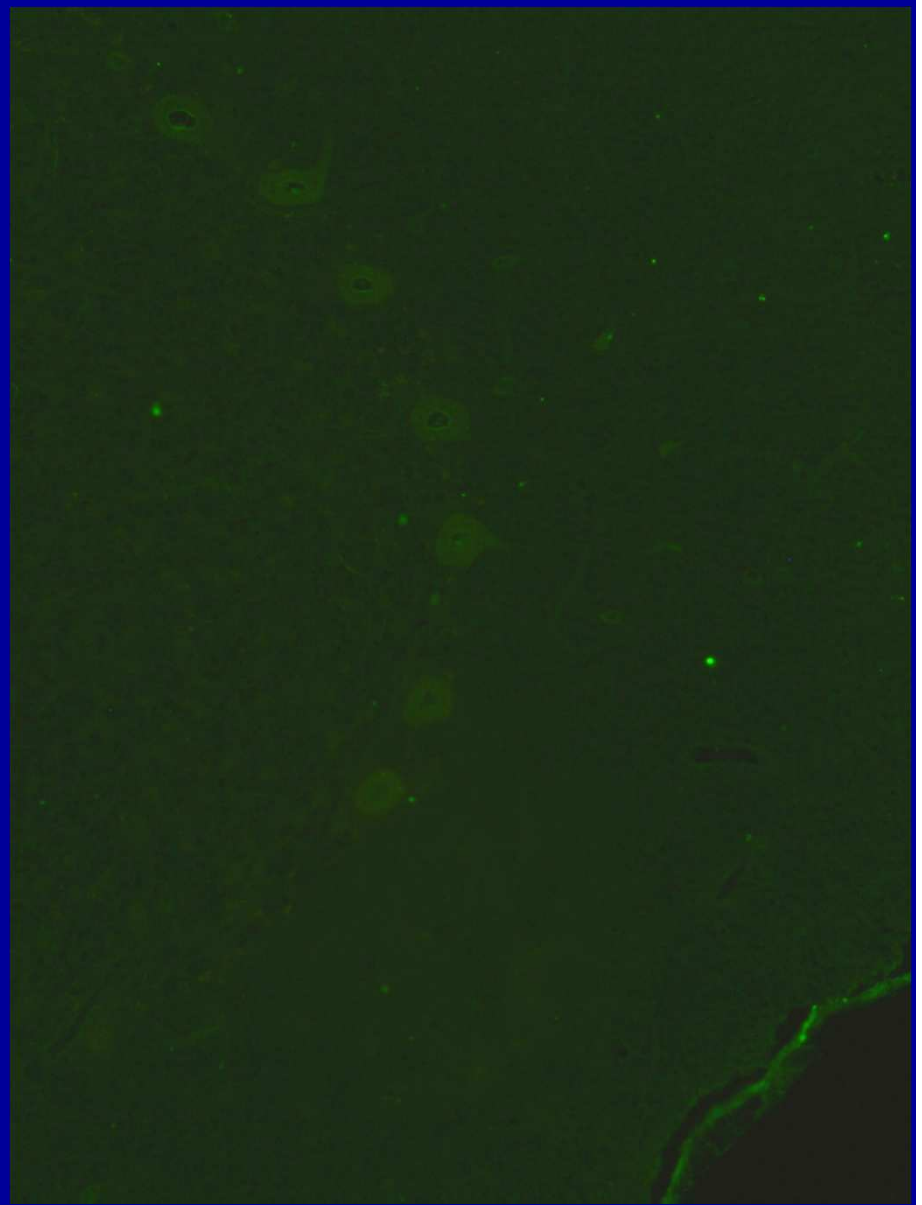
ANTI-TUBULIN $\beta 3$



RL7 2015

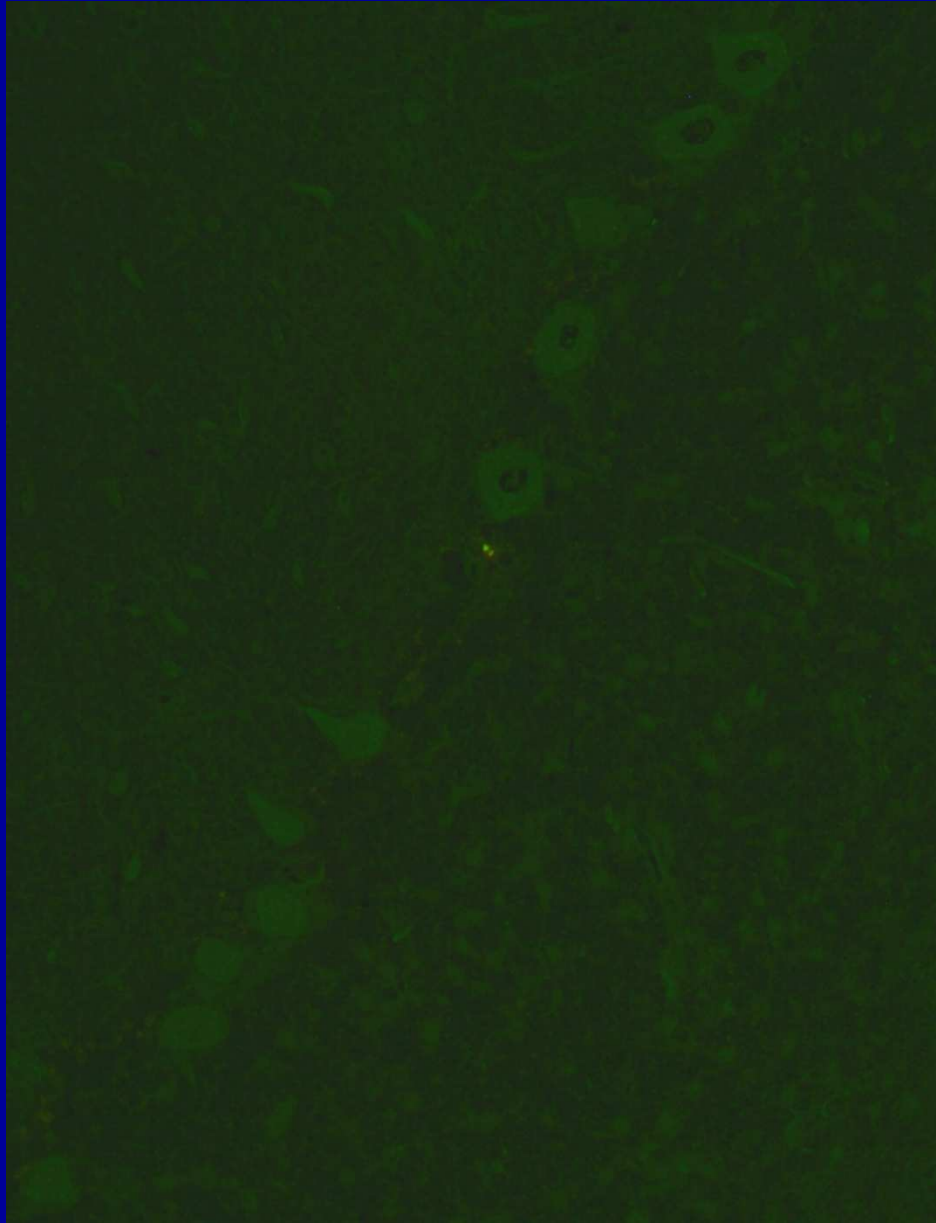


IgG

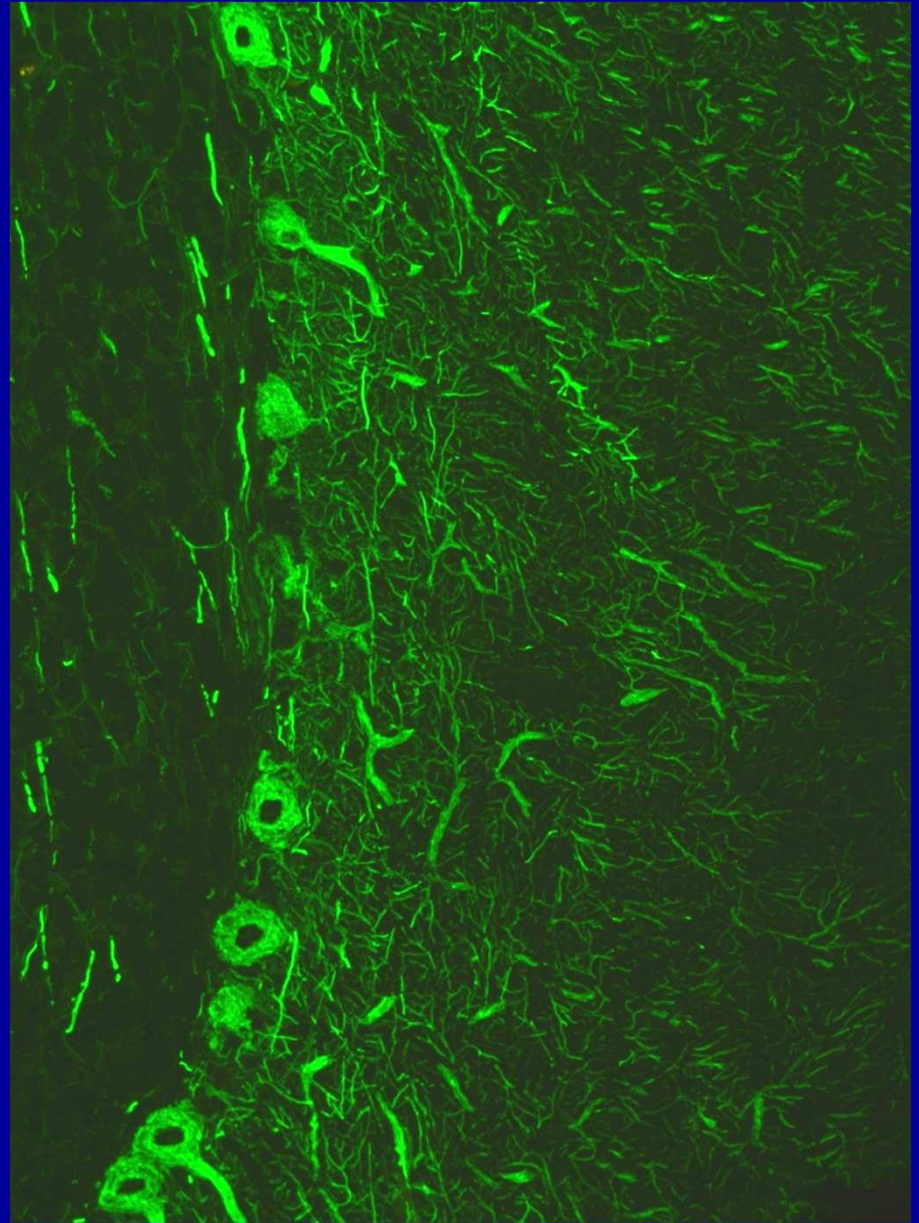


IgM

RLH 2015



Kappa



Lambda