



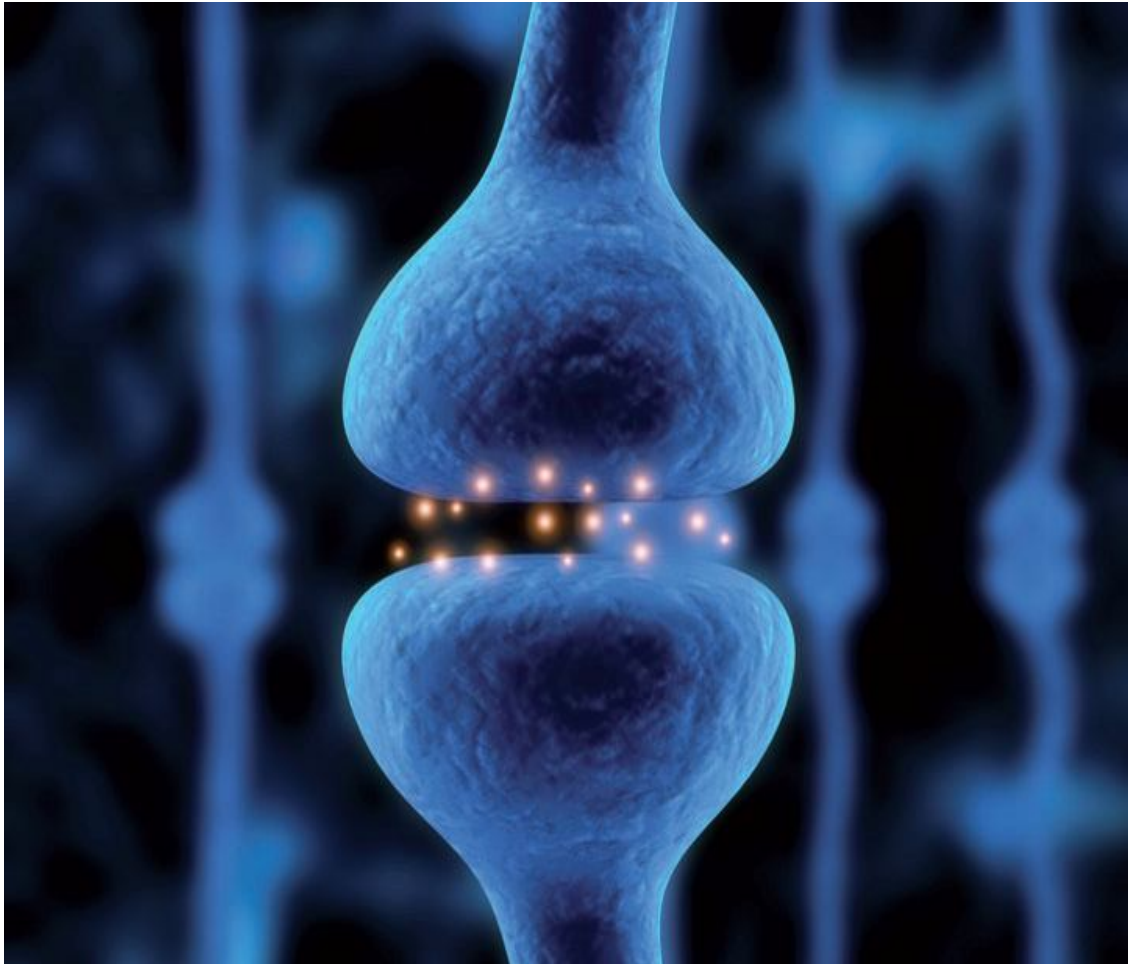
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LABORATORIOS



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Dra. Ana Inés Eichelmann

DETERMINACIONES INMUNOLOGICAS EN NEUROLOGIA



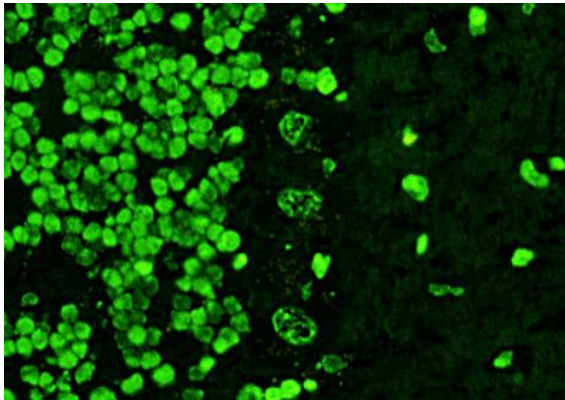
El estudio serológico y de LCR en enfermedades neurológicas utiliza procedimientos altamente sensibles y específicos para la detección de anticuerpos y proteínas, que suplementan los criterios clínicos y contribuyen al establecimiento diagnóstico.

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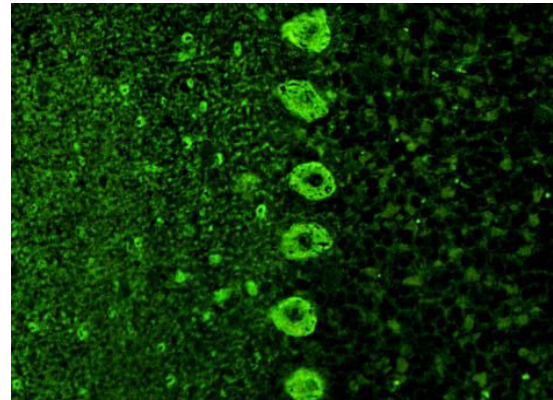
ANTICUERPOS PARANEOPLASICOS CLASICOS

Se realizan por técnicas de Inmunofluorescencia Indirecta y se confirma especificidad mediante ensayos de Immunoblot.

ANNA (HU-RI)

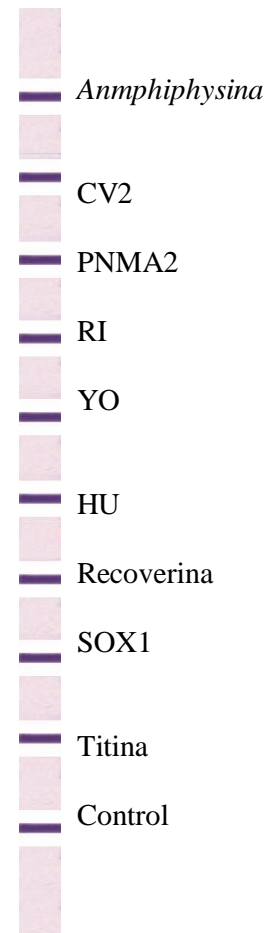


ANTI-YO



Listado de anticuerpos

- ANTI-HU (ANNA-1)
- ANTI-YO (PCA-1)
- ANTI-RI (ANNA-2)
- ANTI-AMPHIPHYSINA
- ANTI-PNMA2 (Ma2/Ta)
- ANTI-CV2
- ANTI-RECOVERINA
- ANTI-SOX1
- ANTI-TITINA

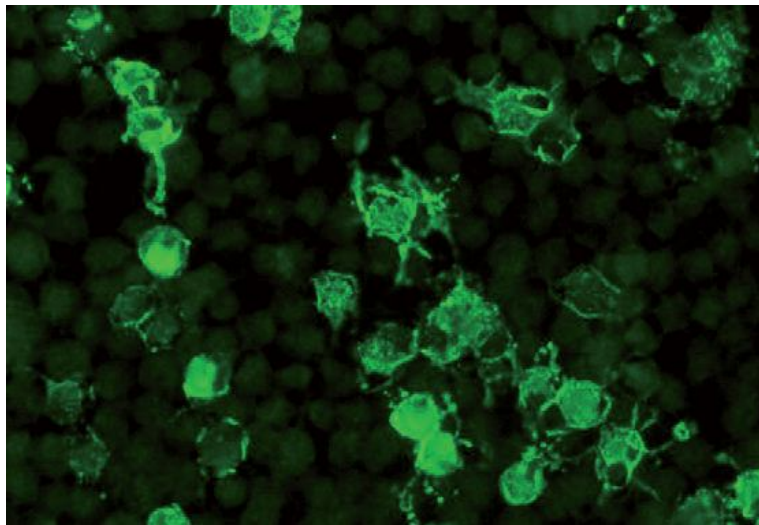


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**ANTICUERPOS EN ENCEFALITIS AUTOINMUNES.
ANTI- RECEPTORES DE MEMBRANA**

Se realizan por técnica de Inmunofluorescencia indirecta. Se utiliza como sustrato células transfectadas, que expresan en su membrana los epitopes específicos lineales y conformacionales

CÉLULAS TRANSFECTADAS



Listado de anticuerpos

ANTI RECEPTORES GLUTAMATO TIPO NMDA Y AMPA

- ANTI-NMDAR
- ANTI-AMPA1
- ANTI-AMPA2

ANTI PROTEINAS ASOCIADAS A VGKC

- ANTI-CASPR
- ANTI-LGI1

ANTI -RECEPTORES GABA

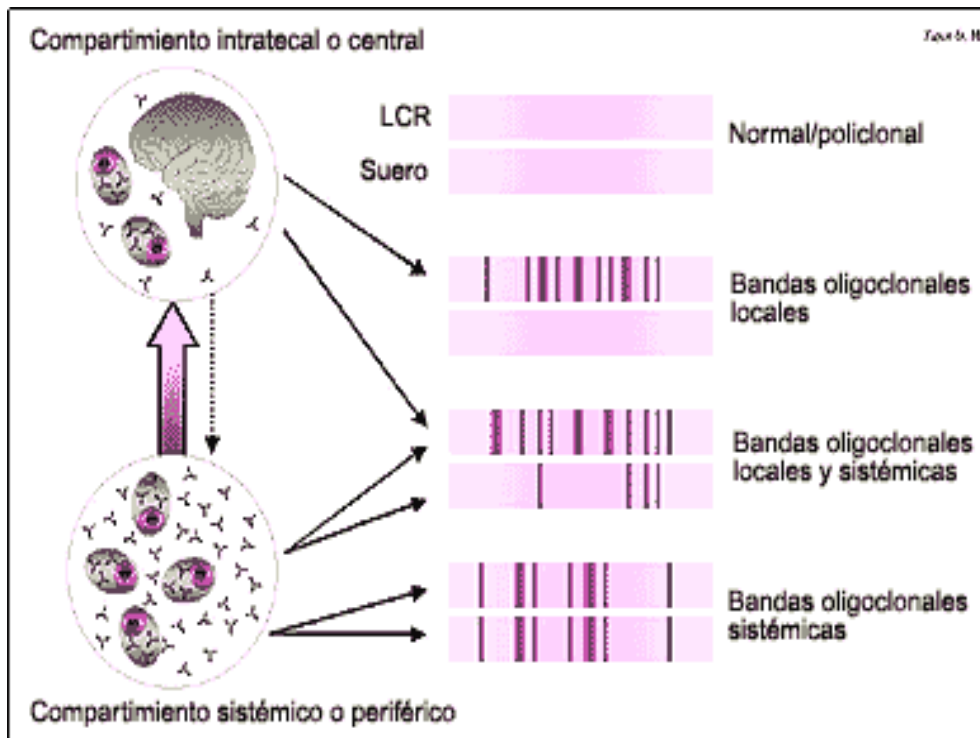
- ANTI-GABARB1/B2

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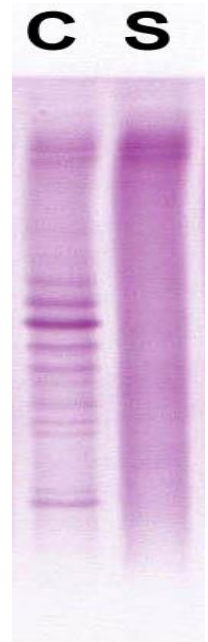
ESCLEROSIS MULTIPLE Y NEUROMIELITIS OPTICA

Listado de determinaciones:

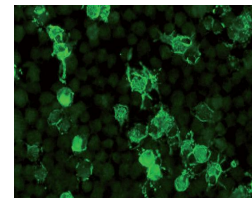
- BANDAS OLIGOCLONALES EN LCR POR ISOELECTROENFOQUE



C: LCR
S: SUE

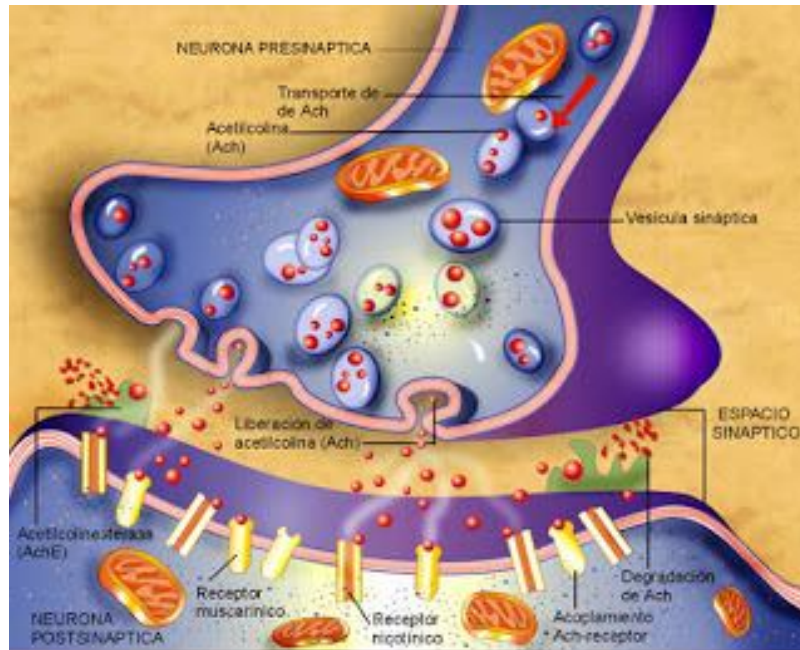


- PROTEINA BASICA DE LA MIELINA (ELISA)
- INDICE DE IGG
- ANTICUERPOS ANTI-AQ4 (IFI- Células Transfectadas)



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ANTICUERPOS EN MIASTENIA GRAVIS (UNION NEUROMUSCULAR)



Listado de determinaciones:

- ANTI-RECEPTOR DE ACETIL COLINA (ACHRA) (RIA)
- ANTI-MUSK (RIA)
- ANTI-TITINA (INMUNOBLOT)

ANTICUERPOS EN POLINEUROPATIAS

- ANTI-ASIALO GM1
- ANTI-GM1
- ANTI-GM2
- ANTI-GD1a
- ANTI-GD1b
- ANTI-GQ1b
- ANTI-MAG-IGM

SINDROME DE STIFF-PERSON

- ANTI-GAD
- ANTI-AMPHIPHYSINA

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ANTICUERPOS ANTI-NEURONALES Y SU SIGNIFICANCIA CLINICA

Antibodies (synonym)	Antigen (molecular weight)	Fluorescence pattern	Syndrome	Most frequent tumours
Anti-Hu (ANNA-1)*	Hu protein (38 kDa)	Cell nuclei of central and peripheral neurons	Encephalomyelitis, sensory neuropathy	SCLC, neuroblastoma
Anti-Ri (ANNA-2)*	NOVA (55 kDa and 80 kDa)	Cell nuclei of central neurons	Opsoclonus myoclonus syndrome	Breast carcinoma, SCLC
Anti-Yo (PCA-1)*	CDR2, CDR62 (34 kDa and 62 kDa)	Cytoplasm of the Purkinje cells	Cerebellar degeneration	Ovarian, breast and uterine carcinoma
PCA-2	Purkinje cell protein (280 kDa)	Cytoplasm and dendrites of the Purkinje cells	Encephalitis, neuropathy	SCLC
Anti-Tr (PCA-Tr)	Unknown	Cytoplasm of the Purkinje cells, dot-like fluorescence of the molecular layer	Cerebellar degeneration	Hodgkin's lymphoma
Anti-glia nuclear antibodies (AGNA)	SOX1 protein	Cell nuclei of the Bergmann glia in the Purkinje cell layer	Lambert-Eaton (LEMS), cerebellar degeneration	SCLC
Anti-PNMA1 (Ma1)*	Ma protein (37 kDa)	Nerve cell nucleoli	Rhombencephalitis (brain stem), limbic encephalitis	Breast carcinoma, various tumours
Anti-PNMA2 (Ma2/Ta)*	Ma protein (40 kDa)	Nerve cell nucleoli	Rhombencephalitis (brain stem), limbic encephalitis	Testicular tumour
Anti-GAD	Glutamic acid decarboxylase (65 kDa and 67 kDa)	Stratum granulosum of the cerebellum, pancreatic islet cells	Stiff-person syndrome	Breast carcinoma, SCLC, colon carcinoma
Anti-amphiphysin*	Amphiphysin (128 kDa)	Presynaptic nerve ends on the substrate cerebellum	Stiff-person syndrome	Breast carcinoma, SCLC
Anti-CV2	66 kDa protein	Sand-like fluorescence on CNS tissue sections	Limbic encephalitis	SCLC, thymoma
Anti-AQP-4 (NMO IgG)	Aquaporin-4 protein	Virchow-Robin space along the small arterioles in the grey and white matter of the CNS	Neuromyelitis optica (NMO), LETM, rec. ON	-
Anti-NMDA receptors	Extracellular domain of the NR1 subunit of the receptor	Molecular layer of hippocampus and stratum granulosum of the cerebellum	Anti-glutamate receptor (type NMDA) encephalitis	Teratoma (ovary, testis)
Anti-AMPA receptors (GluR1 and GluR2)	GluR1 and GluR2 subunits of the receptor (each approx. 100 kDa)	Molecular layer of hippocampus and cerebellum	Limbic encephalitis	Breast carcinoma, thymoma, lung carcinoma
Anti-mGluR1	Metabotropic glutamate receptor (approx. 140 kDa)	Cytoplasm of the Purkinje cells	Cerebellar degeneration	Hodgkin's lymphoma
GABA _A receptors	Extracellular domain of the GABA _A subunit of the receptor	Molecular layer of hippocampus and cerebellum	Limbic encephalitis	SCLC
Anti-LGI1	Protein (60 kDa) associated with voltage-gated potassium channels (VGKC)	Molecular layer of hippocampus and cerebellum	Limbic encephalitis	SCLC, ovarian teratoma, thymoma, various tumours
Anti-CASPR2	Protein associated with voltage-gated potassium channels (VGKC)	Molecular layer of hippocampus and cerebellum	Limbic encephalitis, neuromyotonia, Morvan's syndrome	Thymoma, uterine carcinoma
Anti-recoverin	Recoverin (23 kDa and 65 kDa)	Photoreceptors of the retina	Retinopathy	SCLC
Anti-titin	Titin	Striated muscles	Myasthenia gravis	Thymoma

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CODIGOS DE PRACTICAS IACA
MATERIAL EXAMINADO: SUERO

0504- Ac. anti-**Hu**

0506- Ac. anti-**Yo**

0615- Ac. anti –**Hu, Yo y Ri**

6807- Ac. anti-Ag neuronales asociados a encefalitis autoinmune, incluye:

Ac. anti-**NMDAR** (receptor de glutamato tipo NMDA)

Ac. anti-**AMPA1** (receptor de glutamato tipo AMPA1)

Ac. anti-**AMPA2** (receptor de glutamato tipo AMPA2)

Ac. anti- **CASPR2** (proteína asociada a contactina)

Ac. anti- **LGI1** (proteína 1 de glioma inactivada rica en leucina)

Ac. anti-**GABAB-R** (receptor de GABA B)

6806 – Ac. anti-NMDA receptor

0627- Ac. anti-antígenos neuronales panel, incluye:

Ac. anti-**Anfifisina**

Ac. anti-**CV2**

Ac. anti-**PNMA2** (Ma2/Ta)

Ac. anti- **Ri**

Ac. anti-**Yo**

Ac. anti-**Hu**

Ac. anti-**Recoverina**

Ac. anti-**SOX1**

Ac. anti-**Titina**

7667- Ac. anti-**MAG-M**

5605- Ac. Anti-**Aquaporina 4** o anti-NMO

7644- Isoelectroenfoque para investigación de **Bandas Oligoclonales** en LCR.

7892-Anticuerpos anti-gangliósidos GD1b

7893-Anticuerpos anti-gangliósidos GM1

7659- Ac. Anti-Panel de gangliósidos (incluye asiloGM1,GM1,GM2,GD1a, GD1b, GQ1b)

6803- Anti-MUSK



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MATERIAL EXAMINADO: LÍQUIDO CEFALORRAQUÍDEO

6809- anticuerpos anti-Ag neuronales asociados a encefalitis autoinmune,
incluye:

- Anti-**NMDAR** (receptor de glutamato tipo NMDA)
- Anti-**AMPA1** (receptor de glutamato tipo AMPA1)
- Anti-**AMPA2** (receptor de glutamato tipo AMPA2)
- Anti- **CASPR2** (proteína asociada a contactina)
- Anti- **LGI1** (proteína 1 de glioma inactivada rica en leucina)
- Anti-**GABAB-R** (receptor de GABA B)

6808 - anti-NMDA receptor