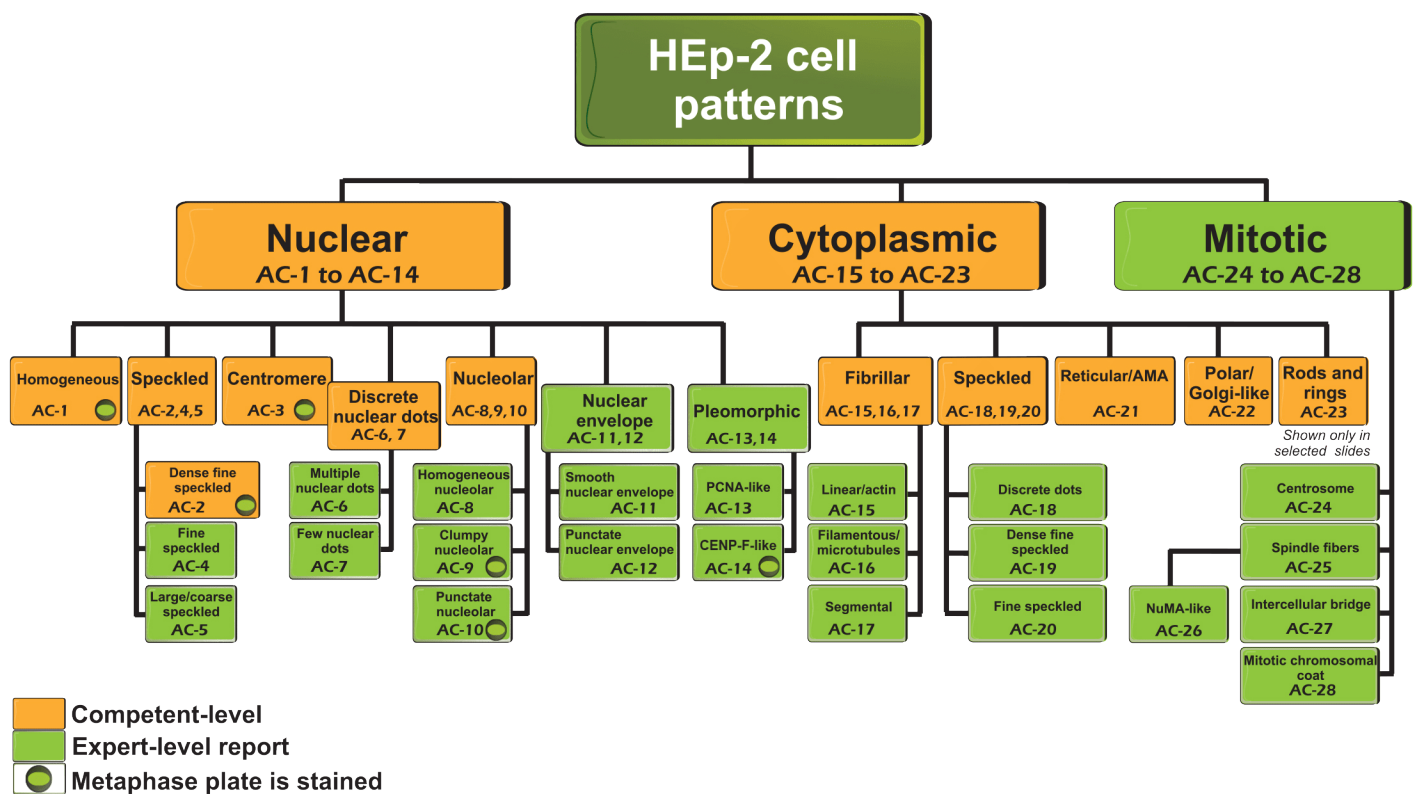




Nomenclature and Classification Tree



Patterns	Synonyms	Antigen Associations	Disease Association
Homogeneous (AC-1)	diffuse	dDNA, nucleosomes, histones	SLE, drug-induced lupus, juvenile idiopathic arthritis
Speckled (AC-2,4,5)	granular	hnRNP, U1RNP, Sm, SS-A/Ro (Ro60), SS-B/La, RNA polymerase III, Mi-2, Ku	MCTD, SLE, SjS, DM, SSc/PM overlap
Dense fine speckled (AC-2)	none	DFS70/LEDGF	rare in SLE, SjS, SSc
Fine speckled (AC-4)	fine granular	SS-A/Ro (Ro60), SS-B/La, Mi-2, TIF1, TIF1B, Ku, RNA helicase A, Replication protein A	SjS, SLE, DM, SSc/PM overlap
Large/coarse speckled (AC-5)	spliceosome/nuclear matrix	hnRNP, U1RNP, Sm, RNA polymerase III	MCTD, SLE, SSc
Discrete nuclear dots			
Centromere (AC-3)	kinetochore	CENP-A/B (C)	limited cutaneous SSc, PBC
Multiple nuclear dots (AC-6)	6-20 nuclear dots, Nsp1, PML bodies	Sp100, PML proteins, Mj/NXP-2	PBC, SARD, PM/DM
Few nuclear dots (AC-7)	1 to 6 nuclear dots, Cajal bodies (coiled body)	p80-coilin, SMN	SjS, SLE, SSc, PM, asymptomatic individuals
Nucleolar (AC-8,9,10)			
Homogeneous (AC-8)	none	PM/ScI-75, PM/ScI-100, Th/Tb, B23/Nucleophosmin, nucleolin, No55/Sc55	SSc, SSc/PM overlap
Clumpy (AC-9)	none	U3-snoRNP/fibrillar	SSc
Punctate (AC-10)	nucleolar speckled	RNA polymerase I, hUBF/NOR-90	SSc, SjS
Nuclear envelope (NE) (AC-11,12)			
Smooth NE (AC-11)	nuclear rim, nuclear	lamins A,B,C, or	SLE, SjS, seronegative arthritis
Punctate NE (AC-12)	nuclear membrane pores	nuclear pore complex proteins (i.e. gp210)	PBC
Pleomorphic (AC-13,14)			
PCNA-like (AC-13)	none	PCNA	SLE, other conditions
CENP-F-like (AC-14)	MSA-3, Nsp-II	CENP-F	cancer, other conditions

Patterns	Synonyms	Antigen Associations	Disease Association
Fibrillar (AC-15,16,17)			
Linear/actin (AC-15)	actin-like	actin, non-muscle myosin	MCTD, chronic active hepatitis, liver cirrhosis, myasthenia gravis, Crohn's disease, PBC, long term hemodialysis, rare in SARD other than MCTD
Filamentous/microtubules (AC-16)		vimentin, cytokeratins	infectious or inflammatory conditions, long-term hemodialysis, alcoholic liver disease, SARD, psoriasis, healthy controls
Segmental (AC-17)		alpha-actinin, vinculin, tropomyosin	myasthenia gravis, Crohn's disease, ulcerative colitis
Speckled (AC-18 to AC-20)			
Discrete dots (AC-18)	GW body, processing body, lysosome*	GwlR2, Sxl/Agp2, *no molecular evidence to support this pattern is associated with lysosomal targets	PBC, SARD, neurological and autoimmune conditions
Dense fine speckled (AC-19)	homogeneous	PL-7, PL-12, ribosomal P proteins	"anti-synthetase syndrome", PM/DM, SLE, juvenile SLE, neuropsychiatric SLE
Fine speckled (AC-20)	speckled	Jo-1/histidyl-tRNA synthetase	anti-synthetase syndrome, PM/DM, limited SSc, idiopathic pleural effusion
Reticular/AMA (AC-21)	mitochondria-like	PDC-E2/M2, BCOADC-E2, OGDH-E2, E1a subunit of PDC, E3BP/protein X	common in PBC, SSc, rare in other SARD
Polar/Golgi-like (AC-22)		giantin/macrogolgin, golgin-95/GM130, golgin-160, golgin-97, golgin-245	rare in SjS, SLE, RA, MCTD, GPA, idiopathic cerebellar ataxia, paraneoplastic cerebellar degeneration, viral infections
Rods and rings (AC-23)		IMPDH2, others	HCV patients post-IFN/ribavirin therapy, rare in SLE, Hashimoto's and healthy controls

Patterns	Synonyms	Antigen Associations	Disease Association
Mitotic patterns			
Centrosome (AC-24)	centrioles	pericentrin, ninein, Cep250, Cep110, enolase	rare in SSc, Raynaud's phenomenon, infections (viral and mycoplasma)
Spindle fibers (AC-25)	MSA-2	HsEg5	rare in SjS, SLE, other SARD
NuMA-like (AC-26)	MSA-1	centrophilin	SjS, SLE, other
Intercellular bridge (AC-27)	stem body, midbody	aurora kinase B, CENP-E, MSA-2, KIF-14, MKLP-1	rare in SLE, Raynaud's phenomenon, malignancy
Mitotic chromosomal coat (AC-28)	chromosome coat protein, dividing cell antigen, mitotic chromosome autoantigen (MCA)	modified histone H3, MCA-1	rare in discoid lupus erythematosus, chronic lymphocytic leukemia, SjS, and polymyositis/rheumatica