

# THE DREAM OF AN EQA PROVIDER: A HARMONIZED WAY OF COMPLETING EQA FORMS

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# IMPORTANCE!!

- Reporting of EQA results
- Correct & complete information
  - > correct evaluation of results
  - > traceability of 'incorrect' results
  - > complete kit name & catalogue number
- FORMs are a part of the ISO17043 quality system
- Signature -> confirmation of results by responsible

**CHECK BEFORE SUBMITTING!!**

**Submit scan via e-mail!!**

# Indirect Immunofluorescence (IIF)

## IIF SUBSTRAAT

		Code fabrikant	Naam kit	Catalogusnummer *	Lotnummer individuele componenten °
1010	<input checked="" type="checkbox"/> Hep-2 cellen <input type="checkbox"/> Hep-2000 cellen <input type="checkbox"/> Hep-2010 cellen	102	IIFT: mosaic basic profile 3A	FA-1802-1005	Substraat : ..... ..... Conjugaat : ..... .....

3 types of cell lines

- HEp-2
- HEp-2010: higher portion of mitotic cells -> better identification of antibodies against mitosis-specific structures
- HEp-2000: genetically engineered cells -> higher sensitivity to SSA autoantibodies

# IIF (cont.)

Which cells where?

	HEp-2	HEp-2010	HEp-2000
Alphadia	x		
DiaSorin	x		
EUROIMMUN	x	x	
Immuno Concepts	x		x
Inova Diagn.	x		
Kallestad	x		
Menarini Diagn.	x		

# IIF - technique

## TECHNIQUE IFI

### Application et incubation de l'échantillon

- Manuelle  
 Automatisée

Dilution de screening: 1/.....

Nom appareil: .....

Firme appareil: .....

### Lecture de l'immunofluorescence

- Manuelle  
 Automatisée avec lecture d'un titre final basé sur :  
 une dilution : 1/.....  série de dilutions

Nom microscope: .....

Firme microscope : .....

Est-ce que le résultat de la lecture de l'immunofluorescence est corrigé par l'opérateur:  Oui  Non

Info used for:

- Evaluation of manual vs automatic
- Evaluation of one method vs other + within method
- Evolution of technique used

# IIF - ANA patterns

Verplicht in te vullen		Optioneel		
1	2	3	4	
<input type="checkbox"/> NEGATIEF (AC-0)				
<input type="checkbox"/> POSITIEF (AC-1 t/m AC-20)	Indien positief voor een nucleair, cytoplasmatisch, mitotisch of niet gedefinieerd patroon, gelieve onderstaande tabellen verder aan te vullen.			
<input type="checkbox"/> NUCLEAIR (AC-1 t/m AC-14, AC-20)	<input type="checkbox"/> HOMOGEEN (AC-1)	<input type="checkbox"/> Dicht fijn gespikkeld (AC-2)		
	<input type="checkbox"/> GESPIKKELD (AC-2,4,5,29)	<input type="checkbox"/> Fijn gespikkeld (AC-4)	<input type="checkbox"/> SSA (Hep-2000)	
	<input type="checkbox"/> CENTROMEER (AC-3)	<input type="checkbox"/> Grof gespikkeld (AC-5)	<input type="checkbox"/> Topo 1-achtig (AC-29)	
	<input type="checkbox"/> NUCLEAIRE DOTS (AC-6,7)	<input type="checkbox"/> Multipole nucl. dots (AC-6)	<input type="checkbox"/> Enkele nucl. dots (AC-7)	
	<input type="checkbox"/> NUCLEOLAIR (AC-8,9,10)	<input type="checkbox"/> Nucleair homogeen (AC-8)	<input type="checkbox"/> Nucleair gebinkt (AC-9)	
	<input type="checkbox"/> KERNMEMBRAAN (AC-11,12)	<input type="checkbox"/> Nucleair gespikkeld (AC-10)	<input type="checkbox"/> Kernmembr. glad (AC-11)	
	<input type="checkbox"/> PLEOMORF (AC-13,14)	<input type="checkbox"/> Kernmembr. gespikkeld (AC-12)	<input type="checkbox"/> PCNA-achtig (AC-13)	
	CUT-OFF: 1/..... TITER: 1/..... <input type="checkbox"/> Niet uitgevoerd		<input type="checkbox"/> CENP-F-achtig (AC-14)	
	<input type="checkbox"/> CYTOPLASMATISCH (AC-15 t/m AC-23)	<input type="checkbox"/> FIBRILLAIR (AC-15,16,17)	<input type="checkbox"/> Fibrillair lineair (AC-15)	
		<input type="checkbox"/> GESPIKKELD (AC-18,19,20)	<input type="checkbox"/> Fibrillair filamentair (AC-16)	<input type="checkbox"/> Fibrillair segmentaal (AC-17)
<input type="checkbox"/> RETICULAIRAMA (AC-21)		<input type="checkbox"/> Discrete dots (AC-18)	<input type="checkbox"/> Dicht fijn gespikkeld (AC-19)	
<input type="checkbox"/> GEFASINDE (AC-22)		<input type="checkbox"/> Dicht fijn gespikkeld (AC-19)	<input type="checkbox"/> Fijn gespikkeld (AC-20)	
<input type="checkbox"/> STAANFJES en RINGEN (AC-23)		CUT-OFF: 1/..... TITER: 1/..... <input type="checkbox"/> Niet uitgevoerd		
<input type="checkbox"/> MITOTISCH (AC-24 t/m AC-28)	<input type="checkbox"/> CENTROSOMEN (AC-24)	<input type="checkbox"/> Spoelraden (AC-25)	<input type="checkbox"/> NUMA-achtig (AC-26)	
	<input type="checkbox"/> Intercellulaire bruggen (AC-27)	<input type="checkbox"/> Intercellulaire bruggen (AC-27)		
	<input type="checkbox"/> Chromosomaal (AC-28)	CUT-OFF: 1/..... TITER: 1/..... <input type="checkbox"/> Niet uitgevoerd		
<input type="checkbox"/> NIET GEDEFINEERD (AC-30)				

Based on:

- ICAP nomenclature  
[https://www.anapatterns.org/view\\_pattern.php?pattern=2](https://www.anapatterns.org/view_pattern.php?pattern=2)
- FR/DE: cf. website  
NL: Damoiseaux et al., 2018
- Regular updates

Important:

- Complete at least level 1 and 2
- Complete titer and cut-off

Atyp  led

# Anti-dsDNA

		Code Fabricant	Titre/concentration	Unité	Cut-off	+, - ou +/-
2010	Crithidia luciliae	...				
2020	RIA	...				
2030	dsDNA ELISA / EIA / FEIA	...				
2040	dsDNA dot	...				

- FORM will be adapted to report different kits when >1 method is used
- Addition of  $\mu$ -array
- Sometimes anti-dsDNA analysis is done within anti-ENA kit:  
e.g. AESKU Dot, EUROLine  
-> report it here

# Anti-ENA - screening

3080	ANA / Anti-ENA SCREENING				
Methode 1	Code zie p. 6/10	+, - of +/-		Code zie p. 6/10	+, - of +/-
	.305.	+SSA + SSB		...	
	Naam kit : ...ENA dot 7.....		Naam kit : .....		
Catalogusnummer : HM042.....		Catalogusnummer : .....			

Screening = non specific analysis

- Does not give you which Ab is present
- Positive/negative result

Gelieve in onderstaande tabel, voor elke methode (M1 en M2), de in uw kit aanwezige antigenen aan te kruisen.

	ANA / Anti-ENA Screening					
	Recombinant		Natief		Synthetisch	
	M 1	M 2	M 1	M 2	M 1	M 2
SSA (Ro)						
Ro-52						
Ro-60						
SSB (La)						
Sm						
Sm/RNP						
RNP						
Jo1						
Scl-70						
CENP-B						
CENP-A/F						
Rib-P						

- e.g. ANA-8 ELISA - Theradiag  
 ANA (IgG) screen ELISA - EUROIMMUN  
 ENA 7 screen QUANTAFlash - Inova Diagn.  
 EliA CTD screen/EliA Symphony well - Phadia  
 ENA screen ELISA - Orgentec  
 ENA screen ELISA - Menarini Diagn.  
 ANA-8S ELISA - AESKU  
 EU-8 ENA S ELISA - Launch Diagn.  
 ENA/ANA screen EIA assay - BIO-RAD



# Anti-ENA - identification

3030 IDENTIFICATION : immuno dot / line			
	Code	Nom du kit	N° de catalogue
Méthode 1	...		
Méthode 2	...		

3050 IDENTIFICATION : ELISA / EIA / FEIA / CLIA			
	Code	Nom du kit	N° de catalogue
Méthode 1	...		
Méthode 2	...		

Identification = specific analysis

- Gives you which Ab is present
- Dot/Line = qualitative/quantitative
- ELISA/CLIA/FEIA = quantitative

Geef in onderstaande tabel, voor elke methode (M1 en M2), de in uw kit aanwezige antigenen aan te kruisen  
Geef ook voor elk geanalyseerd antigen, het bekomen resultaat (+, +/-, -) in te vullen.

	IDENTIFICATIE – Methode 1						
	Recombinant	Natief	Synthetisch	Concentratie*	Eenheid	Cut-off	Besluit +, +/-, -
SSA (Ro)							
Ro-52							
Ro-60							
SSB (La)							
Sm							
Sm/RNP							
RNP							
Jo1							
Scl-70							
CENP-B							
CENP-A/B							
Rib-P							
.....							

# Anti-ENA – identification: SSA/Ro60

Company	e.g. kit	SSA = Ro60+Ro52	SSA = Ro60
AESKU	ANA-17 Pro (blot)		x
Alphadia	ENA DOT ANA+DFS70 PROFILE 10 Ag DOT		x
D-Tek	Quantrix + Dot		x
EUROIMMUN	EUROLine		x
IDS	CLIA SSA/Ro CLIA SSA/Ro60	x	x
Inova Diagn.	QUANTALite ENA profile	x	
Menarini Diagn.	Zenit RA SSA/Ro ENA profile AMidot array	x x	x
Mikrogen Diagn.	recomLine ANA/ENA IgG		x
Theradiag	ENA Dot 7 ENALISA	x	x
Phadia/ThermoSc	Elia Ro	x	

# Anti-ENA – identification: SSA/Ro60

Company	e.g. kit	SSA = Ro60+Ro52	SSA = Ro60
AESKU	ANA-17 Pro (blot)		X
Alphadia	ENA DOT ANA+DFS70 PROFILE 10 Ag DOT		X
D-Tek	Quantrix + Dot		X
EUROIMMUN	EUROLine		X
IDS	CLIA SSA/Ro CLIA SSA/Ro60	X	X
Inova Diagn.	QUANTALite ENA profile	X	
Menarini Diagn.	Zenit RA SSA/Ro ENA profile AMidot array	X	
Mikrogen Diagn.	recomLine ANA/ENA		
Theradiag	ENA Dot 7 ENALISA		
Phadia/ThermoSc	Elia Ro		

	IDENTIFICATIE – Methode 1						
	Recombinant	Natief	Synthetisch	Concentratie*	Eenheid	Cut-off	Besluit +, +/-, -
SSA (Ro)							
Ro-52							
Ro-60							
SSB (La)							
Sm							

# Anti-ENA - other tests

		Identificatie	Concentratie	Eenheid	Cut-off	+, - of +/-
4010	Methode te preciseren Type : ANA-17 Pro Code : 329 Naam kit : AESKU BLOT	SSA/Ro60 SSA/Ro52 SSB/La				+ + +

Fill in blot/ELISA/CLIA... in identification

# ACKNOWLEDGEMENTS

Expert committee NIS

QUESTIONS?

SUGGESTIONS?



## Contact

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Presentations will become available on the Sciensano website