

ANDRO-Androstendion	Ser/Pla	1854-9	Androst SerPI-mCnc	Massenkonz.	ng/ml	ANDRO-Androstendion
Beta-hCG (gesamt)	Ser	20415-6	B-HCG Ser EIA 3rd IS-aCnc	arbitr.Konz.	mIU/ml	Beta-hCG (gesamt)
Calcitonin	Ser/Pla	1992-7	Calcit SerPI-mCnc	Massenkonz.	pg/ml	Calcitonin
Cortisol	Ser/Pla	2143-6	Cortis SerPI-mCnc	Massenkonz.	ng/dl	Cortisol
C-Peptid	Ser/Pla	14633-2	C Peptide SerPI-sCnc	Substanzkonz.	nmol/l	C-Peptid
DHEA-S	Ser/Pla	2191-5	DHEA-S SerPI-mCnc	Massenkonz.	ng/dl	DHEA-S
EPO-Erythropoetin	Ser/Pla	15061-5	EPO SerPI-aCnc	arbitr.Konz.	U/l	EPO-Erythropoetin
Folsäure	Ser	2284-8	Folate Ser-mCnc	Massenkonz.	ng/ml	Folsäure
FSH <Follikelstimulierendes Hormon>	Ser/Pla	1067-2	FSH SerPI-aCnc	arbitr.Konz.	U/ml	FSH <Follikelstimulierendes Hormon>
FT3	Ser/Pla	3051-0	T3Free SerPI-mCnc	Massenkonz.	pg/ml	FT3
FT4	Ser/Pla	3024-7	T4 Free SerPI-mCnc	Massenkonz.	ng/dl	FT4
HGH	Ser/Pla	1963-7	Growth SerPI-mCnc	Massenkonz.	ng/ml	HGH
Homocystein	Ser/Pla	2064-6	Homocystin SerPI-sCnc	Substanzkonz.	µmol/l	Homocystein
Insulin	Ser/Pla	20448-7	Insulin SerPI-aCnc	arbitr.Konz.	µU/ml	Insulin
LH <Luteinisierendes Hormon>	Ser/Pla	10501-5	LH SerPI-aCnc	arbitr.Konz.	mIU/ml	LH <Luteinisierendes Hormon>
Osteocalcin	Ser	2691-4	Osteonin SerPI-mCnc	Massenkonz.	ng/ml	Osteocalcin
Östradiol	Ser/Pla	2221-4	Estradiol SerPI-mCnc	Massenkonz.	pg/ml	Östradiol
Östradiol, bioverfügbares (BAE)	Ser/Pla	17214-2	Estradiol Bioavail SerPI-mCnc	Massenkonz.	pg/ml	Östradiol, bioverfügbares (BAE)
Östradiol, bioverfügbares (BAE) %	Ser/Pla	13883-4	Estradiol Bioavail fr SerPI	Massenfraktion	%	Östradiol, bioverfügbares (BAE) %
Progesteron	Ser/Pla	2839-9	Progest SerPI-mCnc	Massenkonz.	ng/ml	Progesteron
Prolaktin	Ser/Pla	20568-2	Prolactin SerPI EIA-mCnc	Massenkonz.	ng/ml	Prolaktin
PTH intakt	Ser/Pla	2731-8	PTH-Intact SerPI-mCnc	Massenkonz.	pg/ml	PTH intakt
SHBG	Ser	13967-5	SHBG Ser-sCnc	Substanzkonz.	nmol/l	SHBG
TBG (alpha Anti-Thyreoglobulin) ??????	Ser	8098-6	Thyroglob Ab Ser-aCnc	Massenkonz.	µg/ml	Anti-Thyreoglobulin

DAS LOINC

PROJEKT

DESKAV



**Wozu brauchen wir
das?**

OINC, OINC - Projekt

Das Kapitalsparbuch



Kapitalsparbuch



Sparkapitalbuch



Großkapitalsparbuch



Kapitalistensparbuch

Die Zinsen



4.5% auf 2 Jahre



45⁰/₀₀ auf 24 Monate



4.5 Cent / 1 € auf 2 J.



0.62 OES / 1€ auf 2 J.

Ein Parameter, viele Varianten

Labor	Bezeichnung	Einheit
Labor 1	Eiweiß im Harn	g/l
Labor 2	Protein im Urin	g/l
Labor 3	Gesamteiweiß im Harn	mg/l
Labor 4	Gesamteiweiß im Urin	mg/dl
Labor 5	Totalprotein im Harn	g/l

Ein Parameter, viele Codes

Labor	Bezeichnung	Einheit	Code
Labor 1	Eiweiß im Harn	g/l	111
Labor 2	Protein im Urin	g/l	TP
Labor 3	Gesamteiweiß im Harn	mg/l	CK8
Labor 4	Gesamteiweiß im Urin	mg/dl	S19
Labor 5	Totalprotein im Harn	g/l	100

1. Initiative im SMZ-Ost

	A	B	C	D
1	KAV-IT CODE	DSP NUMMER	DSP CODE	LANGTEXT
2	Y00001	121	A1GK	alpha-1-Globulin Konz.
3	Y00002	114	A1GLOB	alpha-1-Globulin
4	Y00003	122	A2GK	alpha-2-Globulin Konz.
5	Y00004	115	A2GLOB	alpha-2-Globulin
6	Y00005	300	A2GLYC	A 2 Glycoprotein
7	Y00006	295	AAT	A1 Antitrypsin
8	Y00007	971	AATF	A1 Antitrypsin Stuhl
9	Y00008	7501	ACEN	Angiotensin conv.Enzym
10	Y00009	905	ACETR	Aceton qual.
11	Y00010	7571	AFPE	A-Fetoprotein S - E
12	Y00011	758	AFPX	A-Fetoprotein X
13	Y00012	5201	ALATN	ALAT (GPT)
14	Y00013	5203	ALATPN	ALAT (GPT) Plasma
15	Y00014	291	ALB	Albumin
16	Y00015	113	ALB1	Albumin
17	Y00016	120	ALBK	Albumin Konz.
18	Y00017	499	ALBP	Albumin im Plasma

LOINC

Logical
Observation
Identifiers
Names and
Codes

Zielsetzung des LOINC Katalogs

“The purpose of the LOINC® database is to facilitate the exchange and pooling of results, such as blood hemoglobin, serum potassium, or vital signs, for clinical care, outcomes management, and research.”



LOINC ist eine freiwillige Initiative des Regenstrief Institutes, eine non-profit Einrichtung für medizinische Forschung an der Indiana University. LOINC wurde vom Regenstrief Institut und dem LOINC-Komitee als Antwort auf die Notwendigkeit der Übertragung von medizinischen Daten 1994 initiiert.

Facts zu LOINC

(© Regenstrief Inst.)

- **52 000 Parameter, davon 40 000 Laborparameter**
- **empfohlen vom American Clinical Laboratory Association and the College of American Pathologists.**
- **verwendet von großen kommerziellen Labors wie Quest, LabCorp, Mayo Medical Laboratories, and MDS Labs**
- **großen HMOs ...,**
- **Bundesorganisationen: CDC, DOD, VA, and NLM**
- **... has also been adopted by Germany, Switzerland and two Canadian provinces.**

Sollten wir IUPAC verwenden?

International

Union of

Pure and

Appplied

Chemistry

Search for properties by
NPU code:

OR

Search for properties by element:

Search all parts



Search within results of the previous query

Restrict to certain specialties:

Allerg, Chem, Pharm, IEM, MolB, Immuno, Micro, Repro,

Thromb

Display format:

[Info](#)

Query for: 'glucose' [Download results of](#)

[\[NPU01523\] Csf—Glucose; rel.subst.c.\(0](#)

[\[NPU18842\] Synf\(spec.\)—Glucose; arb.c](#)

[\[NPU18017\] P—Glucose; subst.c.\(T24\) =](#)

[\[NPU18097\] Pericardialf.—Glucose; sub](#)

[\[NPU17566\] U—Glucose; am.s.\(proc.\) =](#)

[\[NPU17050\] Drain fluid\(spec.\)—Glucos](#)

[\[NPU17079\] Dialysis solution\(perit.\)—C](#)

[\[NPU14352\] B—Glucose; subst.c.\(5 min](#)

[\[NPU14353\] B\(cB\)—Glucose; subst.c.\(5](#)

[\[NPU14165\] U—Glucose; subst.c.\(150 n](#)

[\[NPU14166\] U—Glucose; subst.c.\(210 n](#)

[\[NPU14167\] U—Glucose; subst.c.\(270 n](#)

[\[NPU14168\] U—Glucose; subst.c.\(330 min\) = ? mmol/l](#)

[\[NPU10652\] P—Glucose; subst.c.\(110 min\) = ? mmol/l](#)

http://dior.imt.liu.se/cnpu/XMLProperty.asp?npu=14352&xsl=1 - Micr...

Blood—
Glucose;
substance concentration(5 minutes after challenge)
millimole/litre
M = 180,16 g/mol
NPU14352
B—Glucose; subst.c.(5 min) = ? mmol/l

Sollten wir IUPAC verwenden?

International Union of Pure and Applied Chemistry

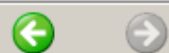
[NPU01349] B—Basophilocytes; num.c. = ? × 10⁹/l

[NPU18316] Lkcs(Syst; spec.)—Basophilocytes; num.fr. = ?

[NPU18344] B—Basophilocytes+Eosinophilocytes+Monocytes; num.c. = ? × 10⁹/l

[NPU18164] Lkcs(Asc)—Basophilocytes; num.fr. = ?

[NPU18293] Lkcs(Csf)—Basophilocytes; num.fr. = ?



Local Term File

Show All

Next

Previous

First

Last

View

Unmapped

Mapped to: Shortname: [Local Term Details](#)

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

GLUCOSE CSF

SEARCH | Hierarchy & Search Limits | Clear Inputs | Propose Term | Lookup Term By #

Hide Words | Clear Most Limits | Common tests 99.+ %tile

Use	Local Words	# Hits	Use	Local Words	# Hits
<input type="checkbox"/> 1	<input type="text"/>		<input type="checkbox"/> 5	<input type="text"/>	
<input type="checkbox"/> 2	<input type="text"/>		<input type="checkbox"/> 6	<input type="text"/>	
<input type="checkbox"/> 3	<input type="text"/>		<input type="checkbox"/> 7	<input type="text"/>	
<input type="checkbox"/> 4	<input type="text"/>		<input type="checkbox"/> 8	<input type="text"/>	

Row	Short Common Name	LOINC #	Component	Property	Time	System	Scale	Method	Class	Type	Or
[Empty Table Body]											

[View Details](#)

[Tree View](#)

[Print Grid](#)

[Map](#)

[Same](#)

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Local Term File

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View

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OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

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GLUCOSE CSF

SEARCH Hierarchy & Search Limits Clear Inputs Propose Term Lookup Term By #

Hide Words Clear Most Limits Common tests 99.+ %tile

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/> 1	<input type="text" value="GLUCOSE"/>	669	<input type="checkbox"/> 5	<input type="text"/>	
<input checked="" type="checkbox"/> 2	<input type="text" value="CSF"/>	1386	<input type="checkbox"/> 6	<input type="text"/>	
<input type="checkbox"/> 3	<input type="text"/>		<input type="checkbox"/> 7	<input type="text"/>	
<input type="checkbox"/> 4	<input type="text"/>		<input type="checkbox"/> 8	<input type="text"/>	

Row	Short Common Name	LOINC #	Component	Property	Time	System	Scale	Method	Class	Type	Or	View Details
1	Glucose CSF-sCnc	14744-7	Glucose	SCnc	Pt	CSF	Qn		CHEM	1	BC	Tree View
2	Glucose CSF-mCnc	2342-4	Glucose	MCnc	Pt	CSF	Qn		CHEM	1	BC	Print Grid
3	Glucose CSF:SerPl	2352-3	Glucose CSF/Glucose plas	RIMCnc	Pt	Plas+CSF	Qn		CHEM	1	OE	Map
4	Prot + Glucose Pnl CSF	34546-2	Protein & Glucose panel	MCnc	Pt	CSF	Qn		PANEL.CHEM	1	OF	Same

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Local Term File

Show All

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Mapped to: Shortname: [Local Term Details](#)

OBR-4 Code: OBX-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

GLUCOSE CSF

SEARCH Hierarchy & Search Limits Clear Inputs Propose Term Lookup Term By #

Hide Words Clear Most Limits Common tests 99.+ %tile

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/> 1	<input type="text" value="GLUCOSE"/>	669	<input type="checkbox"/> 5	<input type="text"/>	
<input checked="" type="checkbox"/> 2	<input type="text" value="CSF"/>	1386	<input type="checkbox"/> 6	<input type="text"/>	
<input type="checkbox"/> 3	<input type="text"/>		<input type="checkbox"/> 7	<input type="text"/>	
<input type="checkbox"/> 4	<input type="text"/>		<input type="checkbox"/> 8	<input type="text"/>	

Row	Short Common Name	LOINC #	Component	Property	Time	System	Scale	Method	Class	Type	Or
1	Glucose CSF-sCnc	14744-7	Glucose	SCnc	Pt	CSF	Qn		CHEM	1	BC
2	Glucose CSF-mCnc	2342-4	Glucose	MCnc	Pt	CSF	Qn		CHEM	1	BC
3	Glucose CSF:SerPl	2352-3	Glucose CSF/Glucose plas	RIMCnc	Pt	Plas+CSF	Qn		CHEM	1	OE
4	Prot + Glucose Prl CSF	34546-2	Protein & Glucose panel	MCnc	Pt	CSF	Qn		PANEL.CHEM	1	OF

DETAILS

Tree View

Print Grid

Map

Same

Copy to Clipboard

Save to File

Reset Col Order

14744-7 Glucose CSF-sCnc

NAME

Component	Property	Time	System	Scale	Method
Glucose	sCnc	Pt	CSF	Qn	

BASIC PROPERTIES

Class/Type:	CHEM/Lab
Mole ID:	50-99-7
Order vs. Obs.:	BOTH
Units Required:	Y
US or EU Property:	S

UNITS

Unit	Source Type
mmol/L	CHI

LOINC Grundsätze: Spezimen

„We are guided by the pragmatics of conventional usage:

If laboratories define separate tests for the same measurements done on different specimens, we will define different tests in our dictionary“

LOINC Grundsätze: Methode

„The extent to which we include methods as part of the name is also guided by pragmatics:

Where laboratories do not tend to include the method in the name -- e.g. most of chemistry -- we do not include the method in the name. Where they tend to -- e.g. in immunochemistry -- we do.“

**Finden des richtigen LOINC
Codes ist nicht so einfach wie
es scheint!**

Problemfall C1-Est-INH

C1 Esterase- Inhibitor	Ser	% der Norm
---------------------------	-----	---------------

Problemfall C1-Est-INH

Row	Short Common Name	LOINC #	Component	Property
10	C1INH SerPl-mCnc	4477-6	Complement C1 esterase inhibitor	MCnc
9	C1INH Functional SerPl-mCnc	4476-8	Complement C1 esterase inhibitor.functional	MCnc
2	C1INH Functional SerPl Ql	15161-3	Complement C1 esterase inhibitor.functional	ACnc
1	C1INH Functional Fr SerPl	10634-4	Complement C1 esterase inhibitor.functional/Complement C1 esterase inhibitor.total	MFr
7	C1INH Functional Fld-mCnc	34619-7	Complement C1 esterase inhibitor.functional	MCnc
6	C1INH Free IgM SerPl-mCnc	18213-9	Complement C1 esterase inhibitor free Ab.IgM	MCnc
5	C1INH Free IgG SerPl-mCnc	18212-1	Complement C1 esterase inhibitor free Ab.IgG	MCnc
8	C1INH Fld-mCnc	36906-6	Complement C1 esterase inhibitor	MCnc
4	C1INH Bnd IgM SerPl-mCnc	18211-3	Complement C1 esterase inhibitor bound Ab.IgM	MCnc

try #: 70 of 70

Units

Specimen

Methodless

Common

Battery

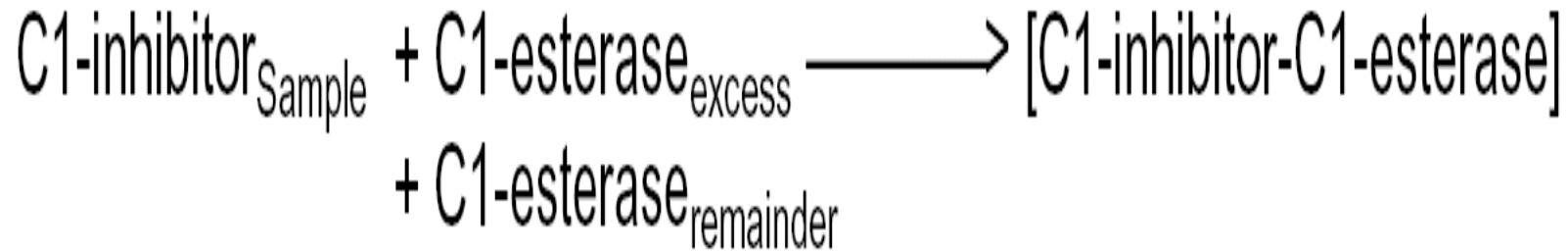
Max Words:

Grid

No Dups

Start-U

Problemfall C1-Est-INH



Problemfall C1-Est-INH

Row	Short Common Name	LOINC #	Component	Property
10	C1INH SerPl-mCnc	4477-6	Complement C1 esterase inhibitor	MCnc
9	C1INH Functional SerPl-mCnc	4476-8	Complement C1 esterase inhibitor.functional	MCnc
2	C1INH Functional SerPl Ql	15161-3	Complement C1 esterase inhibitor.functional	ACnc
1	C1INH Functional Fr SerPl	10634-4	Complement C1 esterase inhibitor.functional/Complement C1 esterase inhibitor.total	MFr
7	C1INH Functional Fld-mCnc	34619-7	Complement C1 esterase inhibitor.functional	MCnc
6	C1INH Free IgM SerPl-mCnc	18213-9	Complement C1 esterase inhibitor free Ab.IgM	MCnc
5	C1INH Free IgG SerPl-mCnc	18212-1	Complement C1 esterase inhibitor free Ab.IgG	MCnc
8	C1INH Fld-mCnc	36906-6	Complement C1 esterase inhibitor	MCnc
4	C1INH Bnd IgM SerPl-mCnc	18211-3	Complement C1 esterase inhibitor bound Ab.IgM	MCnc

try #: 70 of 70

Units

Specimen

Methodless

Common

Battery

Max Words:

Grid

No Dups


Start-U

2 Möglichkeiten

- **Einreichung beim Regenstrief-Institut**
- **Die Vergabe eines lokalen Codes**
oder „*Die verbaute Zukunft*“

LOINC Part

Record and explain new part here

Analyte: 

Suffix:

Divisor:

Challenge:

Adjustment:

4th Subpart:

Property:

Time:

Timing Modifier:

System:

Super System:

Scale:

Method:

Units:

Species:

Example Answers (Results) Answer List

Answers:

Related Names:

Comments:

48494-9 C1INH Act/Nor SerPl **kommt aus Wien**

NAME

Component	Property	Time	System	Scale
Complement C1 esterase inhibitor actual/Normal	RIcCnc	Pt	Ser/Plas	Qn

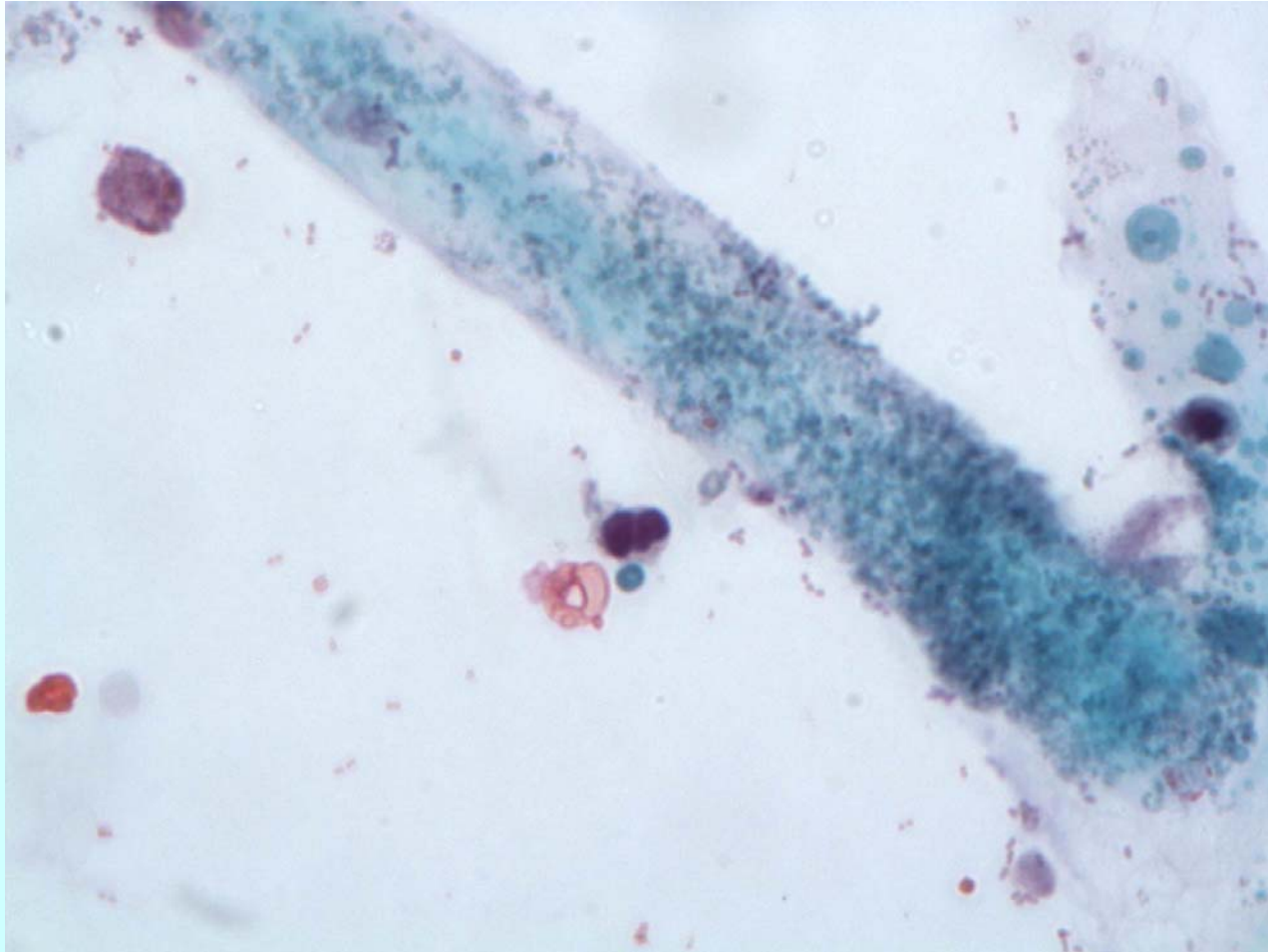
BASIC PROPERTIES

Class/Type:	HEM/BC/Lab
Order vs. Obs.:	BOTH
Units Required:	N

UNITS

Unit	Source Type
%	SUBMITTER

Noch ungelöstes Problem: das automatische Harnsediment



Noch ungelöstes Problem: das automatische Harnsediment



Das automatische Harnsediment

**Meist: negativ, vereinzelt, spärlich, mäßig,
reichlich, massenhaft**

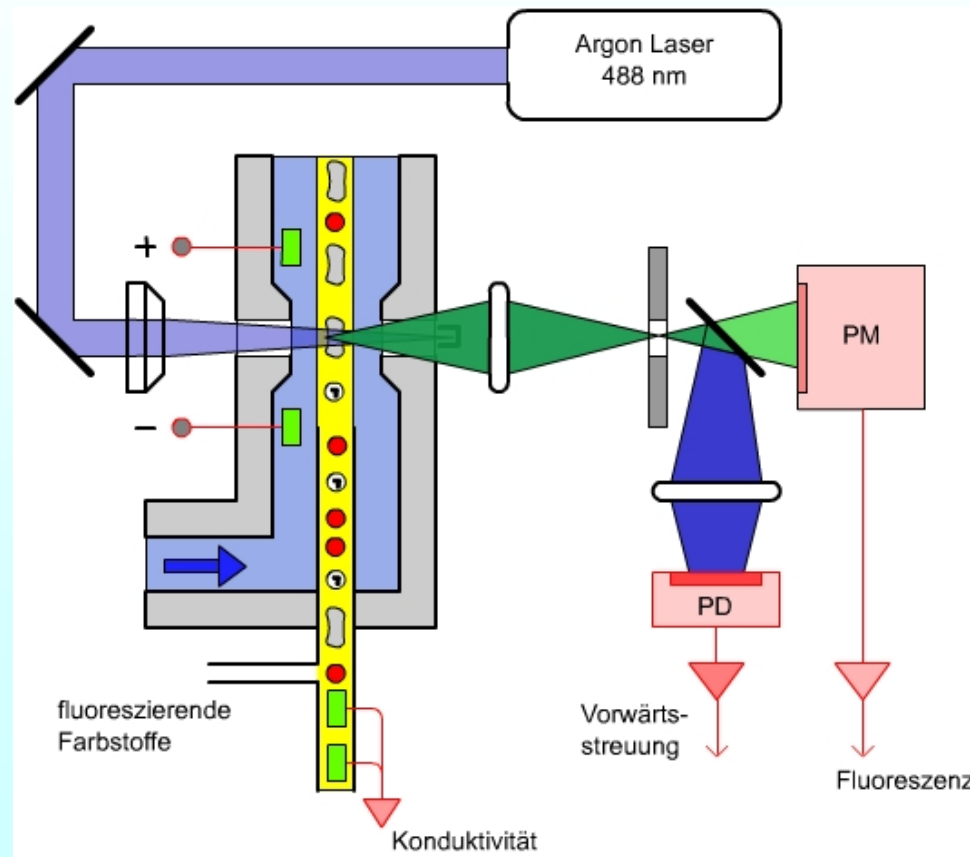
**Manchmal: 0-4 pro GF, 5-15 pro GF, 16-30 pro GF,
reichlich massenhaft - welches Gesichtsfeld LPF,
HPF**

Revolutionär/visionär: Anzahl / μ l

Zusatzproblematik...

Das automatische Harnsediment

....es ist ja gar kein Sediment mehr.



Umfang und Ausblick

Ca. 1800-2000 Analyte

Ca. 300 - 400 Einreichungen

Fertigstellung noch diesen Herbst