## Documentation for Rest-Api HELMNotationToolKit

## Available Services:

Validation of HELM String	/WebService/service/Validation/{HELMNotation}	G E T
Description	Check for conformance to the specification & availability of monomers in the current monomer database. Be careful with special cases in the url	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
HELMNotation	Input HELM String	
Validation of HELM String	/WebService/service/Validation/	P O S T
Description	Check for conformance to the specification & availability of monomers in the current monomer database	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	
Generate Image for Monomer	/WebService/service/Image/Monomer/?monomerId={monomerId} &polymerType={polymerType}	G E T
Description	Image generation of the atom/bond representation of monomer	
Parameter	Description	
Content-Type	Image/png	
Accept	Application/json	
monomerId	MonomerAlternateId of the monomer	
polymerType	PolymerType of the monomer	
Generate Image for Monomer	/WebService/service/Image/Monomer/	P O S T
Description	Image generation of the atom/bond representation of monomer	

Parameter	Description	
Content-Type	Image/Base64	
Accept	Application/FormURLENCODED	
InputJSON	"{\"monomerId\":\"A\","polymerType\":\"PEPTIDE \"}	
Generate Image for HELM	/WebService/service/Image/HELM/{HELMNotation}	G E T
Description	Image generation of the atom/bond representation of the HELM molecule	
Parameter	Description	
Content-Type	Image/png	
Accept	Application/Json	
HELMNotation	Input HELM String	
Generate Image for HELM	/WebService/service/Image/HELM/	P O S T
Description	Image generation of the atom/bond representation of the HELM molcule	
Parameter	Description	
Content-Type	Image/base64	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	
Molecular Weight Calculation	/WebService/service/Calculation/MolecularWeight/{HELMNotation}	G E T
Description	Calculates the molecular weight of a non-ambiguous HELM string	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
HELMNotation	Input HELM String	
Molecular Weight Calculation	/WebService/service/Calculation/MolecularWeight/	P O S T
Description	Calculates the molecular weight of a non-ambiguous HELM string	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	

Molecular Formula Calculation	/WebService/service/Calculation/MolecularFormula/{HELMNotation}	G E T
Description	Calculates the molecular formula of a non-ambiguous HELM string	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
HELMNotation	Input HELM String	
Molecular Formula Calculation	/WebService/service/Calculation/MolecularFormula	P O S T
Description	Calculates the molecular formula of a non-ambiguous HELm string	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	
Extinction coefficient Calculation	/WebService/service/Calculation/ExtinctionCoefficient/{HELMNotation}	G E T
Description	Calculates the extinction coefficient of a non-ambiguous HELM string	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
HELMNotation	Input HELM String	
Extinction Coefficient Calculation	/WebService/service/Calculation/ExtinctionCoefficient/	P O S T
Description	Calculates the extinction coefficient of a non-ambiguous HELM string	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	
Conversion in Canonical HELM	/WebService/service/Conversion/Canonical/{HELMNotation}	G E T
Description	Converts HELM into canonical HELM	

Parameter	Description	
Content-Type	Application/Json	
Accept	Application/Json	
HELMNotation	Input HELM String	
Conversion in Canonical HELM	/WebService/service/Conversion/Canonical/	P O S T
Description	Converts HELM into canonical HELM	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	
Conversion in Standard HELM	/WebService/service/Conversion/Standard/{HELMNotation}	
Description	Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
HELMNotation	Input HELM String	
Conversion in Standard HELM	Input HELM String /WebService/service/Conversion/Standard/	P O S T
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Conversion in Standard HELM	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that	O S
Conversion in Standard HELM  Description	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible	O S
Conversion in Standard HELM  Description  Parameter	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible  Description	O S
Conversion in Standard HELM  Description  Parameter Content-Type	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible  Description  Application/json	O S
Conversion in Standard HELM  Description  Parameter Content-Type Accept	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible  Description  Application/json  Application/json	O S
Conversion in Standard HELM  Description  Parameter Content-Type Accept InputJSON Converts HELM	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible  Description  Application/json  Application/json  "{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	O S T
Conversion in Standard HELM  Description  Parameter Content-Type Accept InputJSON Converts HELM String to FASTA	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible Description  Application/json  Application/json  "{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}  /WebService/service/Fasta/Produce/{HELMNotation}	O S T
Conversion in Standard HELM  Description  Parameter Content-Type Accept InputJSON Converts HELM String to FASTA  Description	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible Description  Application/json  Application/json  "{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}  /WebService/service/Fasta/Produce/{HELMNotation}  Converts HELM String to FASTA-File Format	O S T
Conversion in Standard HELM  Description  Parameter Content-Type Accept InputJSON Converts HELM String to FASTA  Description Parameter	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible Description  Application/json  Application/json  "{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$V2.0\"}  /WebService/service/Fasta/Produce/{HELMNotation}  Converts HELM String to FASTA-File Format  Description	O S T
Conversion in Standard HELM  Description  Parameter Content-Type Accept InputJSON Converts HELM String to FASTA  Description Parameter Content-Type	/WebService/service/Conversion/Standard/  Converts HELM String into Standard HELM Notation. Note that HELM2 will be downcasted to HELM1, if it is possible Description  Application/json  Application/json  "{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"} /WebService/service/Fasta/Produce/{HELMNotation}  Converts HELM String to FASTA-File Format  Description  Application/json	O S T

Converts HELM String to FASTA	/WebService/service/Fasta/Produce/	P O S T
Description	Converts HELM String to FASTA-File Format	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	
Converts Fasta to HELM	/WebService/service/FASTA/Read/?RNA={RNA}&?PEPTIDE={PEPTID E}	G E T
Description	Converts Fasta to HELM and generates HELM String	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
RNA	FASTA-File containing nucleotides	
PEPTIDE	FASTA-File containing peptides	
Converts Peptide Fasta to HELM	/WebService/service/FASTA/Read/PEPTIDE/	P O S T
Description	Converts Peptide Fasta to HELM and generates HELM String	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"PEPTIDE\":\">A\n AAA"}	
Converts RNA Fasta to HELM	/WebService/service/FASTA/Read/RNA/	P O S T
Description	Converts RNA Fasta to HELM and generates HELM String	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
InputJSON	"{\"RNA\":\">A\nGGG"}	
Converts HELM to peptide natural analogue sequence	/WebService/service/FASTA/Convert/PEPTIDE/{HELMNotation}	G E T
Description	Converts HELM string into peptide natural analogue sequence	
Parameter	Description	

Content-Type	Application/json	
Accept	Application/json	
HELMNotation	Input HELM String	
Converts HELM	/WebService/service/FASTA/Convert/PEPTIDE/	Р
to peptide		0
analogue		S
sequence		Т
Description	Converts HELM string into peptide natural analogue sequence	
Parameter	Description	
Content-Type	Application/json	
A t	Application /incu	
Accept InputJSON	<pre>Application/json "{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$V2.0\"}</pre>	
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Converts HELM	/ Websel vice/sel vice/FASTA/ collect (/ KNA/\netivinotation)	G
to RNA analogue		Ε
sequence		T
Description	Converts HELM string into RNA natural analogue sequence	
Parameter	Description	
Content-Type	Application/json	
Accept	Application/json	
HELMNotation	Input HELM string	
Converts HELM	/WebService/service/FASTA/Convert/RNA/	Ρ
to RNA natural		0
analogous		S
_		T
sequence	Consider HEIM at the fall and a selection of the selectio	
Description Parameter	Converts HELM string into rna natural analgues sequence	
Content-Type	Description Application/json	
Accept	Application/json	
InputJSON	"{\"HELMNotation\":\"PEPTIDE1{A.G}\$\$\$\$V2.0\"}	
Read RNA	/WebService/service/Sequence/RNA/{sequence}	G
	, wessel week selved, sequence, many (sequence)	
Sequence		Ε
		Т
		-
Description	Reads RNA Sequence and generates HELMNotation	•
Parameter	Description	-
Parameter Content-Type	<b>Description</b> Application/json	
Parameter Content-Type Accept	Description Application/json Application/json	
Parameter Content-Type Accept sequence	Description Application/json Application/json Input rna sequence	
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Parameter Content-Type Accept sequence	Description Application/json Application/json Input rna sequence	
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Parameter Content-Type Accept sequence Read Peptide Sequence	Description Application/json Application/json Input rna sequence /WebService/service/Sequence/PEPTIDE/{sequence}	G E
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Parameter Content-Type Accept sequence Read Peptide Sequence  Description Parameter	Description Application/json Application/json Input rna sequence /WebService/service/Sequence/PEPTIDE/{sequence}  Reads Peptide Sequence and generates HELMNotation Description	G E
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