

**NAME**

SPChainAbbrev - Methods for processing SP chain abbreviations

**SYNOPSIS**

```
use SPChainAbbrev;

use SPChainAbbrev qw(:all);
```

**DESCRIPTION**

SPChainAbbrev module provides these methods:

```
ChainAbbrevNameExists - Is it a supported chain abbreviation
ExpandChainAbbrev - Expand wild cards in chain abbreviation
GetChainAbbrevToNameMap - Get chain name
GetChainLenAbbrevSupportedMap - Get reference to supported chain
                                abbreviations data
GetChainLenAbbrevDbleBondGeometyDataMap - Get reference to supported
chain                                double bond geometry data
GetSupportedChainLenList - Get supported chain lengths
IsSphingosineChainAbbrev - Is it a sphingosine chain abbreviation
IsSphingosineC18ChainAbbrev - Is it a sphingosine C18 abbreviation
IsSphinganineC18ChainAbbrev - Is it a sphinganine C18 abbreviation
```

**METHODS****ChainAbbrevNameExists**

```
$Status = ChainAbbrevNameExists($ChainAbbrev, $ChainType);
```

Return 1 or 0 based on whether it's a supported chain name.

**ExpandChainAbbrev**

```
$AbbrevArrayRef = ExpandChainAbbrev($Abbrev);
```

Return a reference to an array containing complete chain abbreviations. Wild card characters in chain abbreviation name are expanded to generate fully qualified chain abbreviations.

**GetChainAbbrevToNameMap**

```
$AbbrevNameHashRef = GetChainAbbrevToNameMap();
```

Return a reference to hash with chain abbreviation/name as key/value pair.

**GetChainLenAbbrevSupportedMap**

```
$ChainLenHashRef = GetChainLenAbbrevSupportedMap();
```

Return a reference to hash with supported chain length as hash key.

**GetChainLenAbbrevDbleBondGeometyDataMap**

```
$ChainLenDblBondHashRef =
GetChainLenAbbrevDbleBondGeometyDataMap();
```

Return a reference to hash containing information about chain length, number of double bonds and geometry of double bonds.

**GetSupportedChainLenList**

```
$ChainLengthListRef = GetSupportedChainLenList();
```

Return a reference to a sorted list containing supported chain lengths.

**IsChainAbbrevOkay**

```
$Status = IsChainAbbrevOkay($ChainAbbrev);
```

Return 1 or 0 based on whether chain abbreviation is valid.

**IsSphingosineChainAbbrev**

```
$Status = IsSphingosineChainAbbrev($ChainAbbrev);
```

Return 1 or 0 based on whether it's a sphingosine chain abbreviation.

**IsSphingosineC18ChainAbbrev**

```
$Status = IsSphingosineC18ChainAbbrev($ChainAbbrev);
```

Return 1 or 0 based on whether it's a sphingosine abbreviation with chain length of 18.

**IsSphinganineC18ChainAbbrev**

```
$Status = IsSphinganineC18ChainAbbrev($ChainAbbrev);
```

Return 1 or 0 based on whether it's a sphinganine abbreviation with chain length of 18.

**AUTHOR**

Manish Sud

**CONTRIBUTOR**

Eoin Fahy

**SEE ALSO**

LMAPSStr.pm, ChainStr.pm

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