



**Product name** Human GFAP SIL-protein



**Catalog number** GF128226

**Uniprot ID** P14136

## Product description

Glial fibrillary acidic protein (GFAP), a class-III intermediate filament, is a cell-specific marker that, during the development of the central nervous system, distinguishes astrocytes from other glial cells.

Labelled GFAP is a recombinant protein, stable isotope labelled (SIL), designed for use as an internal standard for quantitative analysis of GFAP by mass spectrometry (MS).

## Protein sequence

MGSSHHHHHSSGMERRRITSAARRSYVSSGEMMVGGGLAPGRRLGPGTRLSLARMPPPLPTRVDFSLAGALNAGFKETRASERAEMMELN DRFASYIEKVRFLQKALAAELNQLRAKEPTKLADVYQAELELRLRLDQLTANSARLEVERDNLAQDLATVRQKLQDETNRLEAENNLAA YRQEADEATLARLDLKERKIESLEEEIRFLRKIHHEEVRELEQQLARQQVHVLDVAKPDLTAALKEIRTQYEAMASSNMHEAEWYRSKFADLTD AAARNAELLRQAKHEANDYRRQLQSLTCDLESLRGTNESLERQMREQEERHVREAASYQEALARLEEEGQSLKDEMARHLQEYQDLLNVKLA LDIEIATYRKLLGEEENRITIPVQTFNSLQIRETSLDTKSVSEGHKRNIVVKTVEMRDGEVIKESKQEHKDV

## Product features and protocols

### Key features

- 1** Purity >73% as determined by SDS-PAGE
- 2** Labelling Uniform-<sup>15</sup>N
- 3** Isotopic incorporation >99% as determined by LC-MS/MS analysis of digested SIL-protein

### Other features

Predicted MW	51.3 kDa
Expression System	<i>E. coli</i>
Purification Tag	PolyHis tag at the N-terminus end
Protein content	Quantitation is carried out by UV spectroscopy at 280 nm using specific extinction coefficient.
Formulation	Liquid 20 mM Tris-HCl pH 8.0, 2 mM DTT

### Product preparation

For product preparation we recommend the following steps:

1. Thaw on ice
2. Vortex gently
3. Centrifuge briefly before opening

### Product storage

The product is liquid and shipped with dry ice.  
**Store at -80 °C upon receipt.**

Once thawed, the protein can be preserved at 4°C for a few weeks.

**Avoid multiple freeze-thaw cycles**

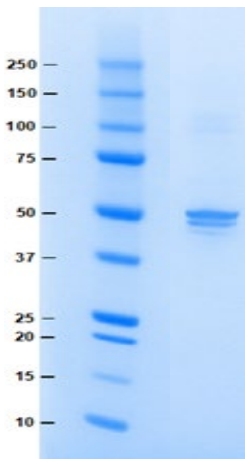
## How to use our product



SIL proteins allow to overcome the process variability since they are added at the very beginning of a sample preparation. This has potential positive impact on your analyte quantification, especially if the analyte interacts with other species commonly present within the matrix (1).



## Supporting information



**GFAP:**  
SDS-PAGE gel analysis of protein in Reduced/Heated conditions (RH) and stained with Coomassie blue.

## References

1. **G.Picard, D. Lebert, et al.** PSAQ standards for accurate MS-based quantification of proteins: from the concept to biomedical applications, *J. Mass Spectrom.* 2012, 47, 1353-1363



The product is intended for research use only. Not for diagnostic or therapeutic use.

## Legal

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