



## Product Data Sheet

<b>Product Name:</b>	<b>Recombinant Human Tau (Tau-441), HiLyte™ Fluor 488 Labeled</b>
<b>Catalog Number:</b>	AS-56085
<b>Lot Number:</b>	See label on vial
<b>Amount:</b>	50 µg or 100 µg
<b>Source:</b>	The recombinant human Tau (Tau-441) (GenBank Accession # AAC04279.1) was expressed and purified from <i>E. coli</i> and conjugated with the fluorescence dye HiLyte Fluor™ 488.
<b>Purity:</b>	Greater than 90% as determined by SDS-PAGE.
<b>Fluorescence:</b>	Green fluorescence. Excitation/Emission wavelengths= 490nm/525nm
<b>DOS:</b>	See label on the vial
<b>Storage:</b>	HiLyte™ Fluor 488 labeled human Tau (Tau-441) is supplied frozen at 1 mg/ml in 10 mM sodium phosphate buffer (pH=7.0). Store at 2-4 °C for immediate use within 1 week or at -80 °C for long-term storage. Keep in dark and avoid repeated freeze-thaw cycles.
<b>Description:</b>	<p>Microtubule associated protein (Tau) is found predominantly in the central neural system and its major function is to promote assembly and to stabilize neuronal microtubules.<sup>1-5</sup> Six isoforms of Tau were identified in humans that are differentiated by the exclusion or inclusion of exons 2, 3, and 10.2-5 Tau-441 is the longest of Tau isoforms that consists of 441 amino acids with molecular mass of 45.8 kDa. Tau441 fluorescent conjugates have been reported in various applications such as protein aggregation, cell uptake study<sup>6-8</sup> and in vitro imaging<sup>9-11</sup>.</p> <p>The fluorescence of HiLyte™ Fluor 488-Tau conjugate can be observed at the excitation/emission wavelength of 490 nm/525 nm.</p>

### Related Products

Product Name	Cat. #
Recombinant Human Tau (Tau-441) Protein	<b>AS-55556</b>
Recombinant Human Tau (Tau-441) Protein, GST tagged	<b>AS-55557</b>

### References:

1. Bulic B., Neuropharmacology. 59 (2010):276-89.
2. Voss K., Mol. Neurodegen. 4 (2009):1-12.
3. Rankin CA., Mol. Neurodegen. 2 (2007):1-14.
4. Patterson KR., J. of Biol. Chem. 286 (2011):23063-76.
5. Wang Y., Biochem. Soc. Trans. 38 (2010):955-61.
6. Michel CH., J Biol Chem. 289 (2014):956-67.
7. Mirbaha H., Elife.7 (2018):e36584.
8. Evans LD., Cell Rep. 22 (2018):3612-24.
9. Chen WY., Nano Lett. 17 (2017):143-9.
10. Boyko S., J Biol Chem. 294 (2019):11054-59.
11. Areche C., ChemistryOpen. 8 (2019):554-9.

***For in vitro research use only.***