



## Anti-Lysyl-tRNA synthetase autoantibodies

### Indications

- ▶ Academic issues, at the moment there do not exist medical indications.

### See also

- ▶ [Anti-Isoleucyl-tRNA synthetase autoantibodies](#)

### Prevalence

Aminoacyl-tRNA synthetases can assemble with each other and with other proteins forming macromolecular complexes. In mammalian cells nine of these tRNA synthetases (arginyl-, asparaginyl-, glutaminy-,  $\alpha$ -glutaminy-, isoleucyl-, leucyl-, lysyl-, methionyl- and prolyl-tRNA synthetase) associate with three protein factors (AIMP/p18, AIMP2/p38, and AIMP1/p43) to form a large multi-aminoacyl-tRNA synthetase complex (Quevillon und Mirande 1996; Ibba and Soll 2000; Kim et al. 2013). In two of 11 patients harboring precipitating antibodies against isoleucyl-tRNA synthetase also antibodies against lysyl-tRNA synthetase (EC 6.1.1.6; M<sub>r</sub> 68 kDa.; cromosoma 16q23.1) were detected, which were able to inhibit the catalytic activity of the enzyme but did not precipitate the tRNA (Targoff et al. 1993; Gelpí et al. 1996). Up to now there exist no additional references pertaining these antibodies, their solitary existence in patients with idiopathic inflammatory myopathy was not recorded.

### Literatur

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