In this thesis we studied precession mechanism in ferromagnetic thin film half-metal NiMnSb. We measured magnetization oscillations using optical pump and probe experiment at temperatures between 15 and 200 K and we evaluated the magnetic anisotropy fields, spin stiffness and Gilbert damping. New setup for ferromagnetic resonance measurement was built utilizing vector network analyser. With this setup we measured FMR at temperatures between 300 and 75 K. We evaluated the same parameters from FMR experiments as from the optical one. We found very good agreement in results obtained by the two methods.