



Sofia Gama 21 November 2021

Praseodymium(III)

Reaction	Baes and Mesmer, 1976	NIST46	Brown and Ekberg, 2016
$Pr^{3+} + H_2O \rightleftharpoons Pr(OH)^{2+} + H^+$	-8.1		-8.30 ± 0.03
$2 \text{ Pr}^{3+} + 2 \text{ H}_2\text{O} \rightleftharpoons \text{Pr}_2(\text{OH})_2^{4+} + 2 \text{ H}^+$			-16.31 ± 0.20
$3 \text{ Pr}^{3+} + 5 \text{ H}_2\text{O} \rightleftharpoons \text{Pr}_3(\text{OH})_5^{4+} + 5 \text{ H}^+$			-35.0 ± 0.3
$Pr(OH)_3(s) + 3 H^+ \rightleftharpoons Pr^{3+} + 3 H_2O$	19.5		18.57 ± 0.20
$Pr(OH)_3(s) \rightleftharpoons Pr^{3+} + 3 OH^-$		-22.3 ± 1.0	

C.F. Baes and R.E. Mesmer, The Hydrolysis of Cations. Wiley, New York, 1976.

P.L. Brown and C. Ekberg, Hydrolysis of Metal Ions. Wiley, 2016, pp. 135-145.

NIST46, NIST Critically Selected Stability Constants of Metal Complexes: Version 8.0. Available at: www.nist.gov/srd/nist46