

Differentiation of Brucella from other urea-positive, oxidase-positive gram-negative coccobacillia

	Brucella spp.	Psychrobacter immobilis	Paracoccus yeei	Psychrobacter phenylpyruvicus	Methylobacterium spp.	Oligella ureolyticaa	Bordetella bronchiseptica, B. hinzii, Cupriavidus pauculus	Hemophilus spp. b
Gram stain morphology	tiny ccb, stains faintly	ccb, rods	cocci in packets	ccb, rods, retains crystal violet	Vacuolated rods	tiny ccb	rods	Tiny ccb
Catalase	+	+	+	+	+	+	+	V
Oxidase	+	+	+	+	+	+	+	V
Urea	+	V	+	+	V	+	+	V
Motility	-	-	-	-	-	+, delayed	+	-
BAP distinctions	-	Prefers 20°C, Odor of roses	Mucoid	-	Pink, mucoid	-	-	No growth ^b
MAC-48 h	-	-	-	-	-	-	+	-

^a Reactions extracted from ASM Sentinel Protocols for *Brucella* spp. and *F. tularemia*; NA, not applicable; v, variable; ccb, coocbacilli. *O. ureolytica* is primarily a uropathogen.

This job aid is a component of the free, on-demand CDC training course "Brucella spp." Find the course at https://www.cdc.gov/labtraining.

ь Only grows on CHOC (requires X & V); or on BAP associated with staphylococcus colony (satellite test).