

Properties and origin of *Acinetobacter baumannii* strains

Strains were allocated to a clone on the basis of the grouping obtained by AFLP and *Hin*dIII-*Hin*cII ribotyping (Nemec et al., 2004). NIPH, Collection A. Nemec, National Institute of Public Health, Prague; LUH and RUH, Collection L. Dijkshoorn, Leiden University Medical Center, the Netherlands; CCM, Czech Collection of Microorganisms, Brno, Czech Republic; LMG, Bacteria Collection, Laboratorium voor Microbiologie Gent, Belgium. Kan, kanamycin; Gen, gentamicin; Net, netilmicin; Tob, tobramycin; Ami, amikacin. BE, Belgium; BG, Bulgaria; CZ, Czech Republic; DK, Denmark; FR, France; GR, Greece; HU, Hungary; IT, Italy; NL, the Netherlands; PL, Poland; PT, Portugal; ES, Spain. -, not found; blank, not known.

Strain designation	Other strain designations	<i>Hin</i> dIII- <i>Hin</i> cII ribotype		Biotype	PCR detection of resistance genes and <i>intI1</i>								5'-3' CS amplicon (kb)	Inhibit. zone diameters (mm) ‡					MIC range (µg/ml) §				Specimen	Date of isolation	City (country) §§	Specialty
		<i>Eco</i> RI ribotype *	†		<i>aacC1</i>	<i>aadA1</i>	<i>aphA1</i>	<i>aphA6</i>	<i>aadB</i>	<i>aacC2</i>	<i>aacA4</i>	<i>intI1</i>		Kan ≤13	Gen ≤12	Net ≤12	Tob ≤12	Ami ≤14	Gen ≥16	Net ≥32	Tob ≥16	Ami ≥64				
Czech clone I strains (n=41)																										
NIPH 7	LUH 3782 = CCM 7031 = LMG 22454	1-1	I	11	+	+	+	+	-	-	-	+	3.0	6	6	15	17	8	>32	16	4	>128	Burn	2/1991	Praha 1 (CZ)	Burns unit
NIPH 10	LUH 3783 = CCM 7116	5-3	u	6	+	+	+	+	-	-	-	+	3.0	6	6	12	15	6	>32	32	8	>128	Blood	7/1991	Praha 1 (CZ)	Burns unit
NIPH 15	LUH 3787 = CCM 7032	1-1	I	6	+	+	+	-	-	-	-	+	3.0	6	6	18	19	21	>32	8	2	2	Burn	6/1991	Praha 1 (CZ)	Burns unit
NIPH 56	LUH 4576	1-1	I	6	-	-	-	-	-	-	-	-	22	16	18	20	21	4	8	2	2-4	Burn	8/1992	Praha 1 (CZ)	Burns unit	
NIPH 188	LUH 4584	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	6	17	7	10	>32	8	>16	64	Urine	10/1993	Praha 1 (CZ)	Medical
NIPH 207	LUH 4585	1-1	I	11	+	+	+	+	-	-	-	+	3.0	6	11	19	22	17	16	8	0.5	8-16	Urine	11/1992	Liberec (CZ)	ICU
NIPH 281	LUH 4635 = CCM 7034	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	6	15	7	7	>32	16	>16	128	Blood	7/1994	Příbram 1 (CZ)	ICU
NIPH 290	LUH 4596	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	6	11	6	6	>32	64	>16	>128	Urine	10/1994	Příbram 1 (CZ)	ICU
NIPH 307	LUH 4602	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	6	17	8	7	>32	8	>16	>128	Burn	6/1994	Ostrava (CZ)	Burns unit
NIPH 309	LUH 4637	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	6	16	7	11	>32	8-16	>16	64	Urine	8/1994	Kladno (CZ)	ICU
NIPH 321	LUH 4640	1-1	I	11	+	+	+	+	-	-	-	+	3.0	6	6	14	17	8	>32	16	4	128	Urine	8/1994	Tábor (CZ)	Nursing home
NIPH 357	LUH 4607	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	7	20	10	14	>32	2-4	16	16-32	Sputum	7/1994	Slaný (CZ)	ICU
NIPH 360	LUH 4609	1-1	I	6	+	+	+	-	-	-	-	+	3.0	6	7	17	19	20	>32	8	2	2	Tracheostomy	8/1994	Přešť (CZ)	ICU
NIPH 392	LUH 4617	1-1	I	11	+	+	+	+	-	-	-	+	3.0	6	7	19	20	9	>32	4	2	128	Decubitus	4/1996	Sedlčany (CZ)	ICU
NIPH 408	LUH 4620	1-1	I	11	+	+	+	-	+	-	-	+	3.0	6	6	13	6	17	>32	32	>16	8	Sputum	4/1996	Přešť (CZ)	ICU
NIPH 409	LUH 4621	1-1	I	6	+	+	+	+	-	-	-	+	2.5	6	6	17	19	9	>32	8	2	64	Urine	4/1996	Brno (CZ)	Surgery ICU
NIPH 470	LUH 4624	1-1	I	6	-	-	-	+	-	-	-	-	6	14	11	20	12	8	64	2	64	Bronchial secretion	1/1997	České Budějovice (CZ)	ICU	
NIPH 654	LUH 4643	1-1	I	6	-	-	-	+	-	-	-	-	6	15	18	19	9	4-8	4-8	2	64	Drainage fluid	3/1996	Praha 1 (CZ)	Surgery	
NIPH 693	LUH 8397	1-1	I	11	+	+	-	+	+	-	-	+	3.0	6	6	16	7	9	>32	16	>16	128	Decubitus	5/1997	Vysoký Brod (CZ)	Nursing home
NIPH 857	LUH 8398	1-1	I	11	+	+	+	+	-	-	-	+	3.0	6	6	17	19	9	>32	8	2	64	Urine	5/1997	Havířov (CZ)	Urology
NIPH 878	LUH 8399	1-1	I	6	+	+	-	+	-	-	-	+	2.5	6	6	13	16	6	>32	32	4-8	>128	Cerebrospinal fluid	1/1998	Praha 2 (CZ)	Paediatrics
NIPH 881	LUH 8400	1-1	I	11	+	+	+	+	-	-	-	+	3.0	6	6	17	19	12	>32	8	2	64	Cannula	2/1998	Cheb (CZ)	
NIPH 921	LUH 8401	1-1	I	NG	+	+	+	+	-	-	-	+	3.0	6	6	18	19	12	>32	8	2	64	Tracheostomy	11/1997	Ústí n/Labem (CZ)	
NIPH 1150	LUH 8402	1-1	I	6	+	+	+	+	-	-	-	+	2.5	6	9	22	21	12	16-32	2	1	32	Tracheostomy	6/1999	Hořovice (CZ)	ICU
NIPH 1358	LUH 8967	1-1	I	12	-	-	-	+	+	-	-	-	6	6	19	8	12	>32	8	>16	64	Wound swab	1/2000	Slaný (CZ)	Surgery	
NIPH 1359	LUH 8968	1-1	I	6	+	+	+	+	-	-	-	+	2.5	6	10	23	22	12	16	2	0.5-1	32	Urine	1/2000	Slaný (CZ)	ICU
NIPH 1475	LUH 8969	1-1	I	11	+	+	+	+	+	-	-	+	2.5	6	6	16	7	8	>32	16	>16	128	Throat swab	2/2001	Cheb (CZ)	ICU
NIPH 1477	LUH 7857	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	6	22	10	19	32	1-2	16	8	Sputum	3/2001	Praha 5 (CZ)	Surgery ICU
NIPH 1486	LUH 8970	1-1	I	11	+	+	+	+	+	-	-	+	3.0	6	6	16	7	11	>32	8-16	>16	64	Blood	3/2001	Praha 1 (CZ)	Burns unit
NIPH 1488	LUH 8971	1-1	I	6	+	+	+	+	-	-	-	+	2.5	6	10	22	22	13	16	2	0.5	32	Blood	2/2001	Praha 1 (CZ)	ICU
NIPH 1499	LUH 7860	1-1	I	6	+	+	+	+	-	-	-	+	2.5	6	9	22	21	13	16	2	1	32	Sputum	3/2001	Praha 4 (CZ)	Surgery ICU
NIPH 1500	LUH 7861	1-1	u	11	+	+	+	+	-	-	-	+	3.0	6	6	17	19	11	>32	8	2	32-64	Urine	3/2001	Praha 4 (CZ)	Surgery ICU
NIPH 1520	LUH 8973	1-1	I	6	+	+	+	-	-	-	-	+	2.5	6	7	17	19	21	>32	8	2	2	Tracheal aspirate	3/2001	Praha 7 (CZ)	ICU
NIPH 1574	LUH 8976	1-1	I	6	+	+	+	+	-	-	-	+	2.5	6	9	22	22	8	16	2	0.5	128	Wound swab	5/2001	Praha 6 (CZ)	Surgery
NIPH 1587	LUH 8404	1-1	XII (I)	11	+	+	+	-	-	-	-	+	3.0	6	6	16	19	20	>32	8-16	2	4	Urine	6/2001	Příbram 1 (CZ)	ICU
NIPH 1605	LUH 7865	3-1	u (I)	11	+	+	+	-	+	-	-	+	2.5	6	6	15	6	19	>32	8-16	>16	4-8	Urine	8/2001	Sedlčany (CZ)	ICU
NIPH 1672	LUH 7868	1-1	I	6	+	+	+	-	-	-	-	+	2.5	6	6	13	19	21	>32	32	2	2	Pus (fistula)	10/2001	Trutnov (CZ)	Surgery
NIPH 1693	LUH 8977	1-1	I	11	+	+	+	+	+	-	-	+	2.5	6	6	15	6	9	>32	16	>16	128	Wound swab	6/2001	Praha 3 (CZ)	Surgery
NIPH 1722	LUH 7872	3-1	u (I)	11	-	-	-	+	+	-	-	-	6	6	16	7	10	>32	8-16	>16	128	Urine	8/2001	Praha 3 (CZ)	Surgery ICU	
NIPH 1729	LUH 7873	1-1	I	11	+	+	+	+	+	-	-	+	2.5	6	6	16	7	12	>32	8	>16	64	Blood	10/2001	Strakonice (CZ)	Surgery ICU
NIPH 1731	LUH 8979	1-1	XII (I)	11	+	+	+	-	-	-	-	+	3.0	6	6	17	19	20	>32	8	2	4	Intravenous cannula	11/2001	Příbram 2 (CZ)	ICU
Non-Czech clone I strains (n=15)																										
RUH 875	NIPH 527 = LMG 10543	1-1	I	6	-	-	+	-	+	-	-	+	0.7	6	6	13	6	19	>32	32	>16	8	Urine	1984	Dordrecht (NL)	Surgical
RUH 3242	NIPH 531 = GNU 1082	3-1	XV (I)	6	+	+	+	-	-	-	-	+	3.0	6	6	17	19	21	>32	8	2	2	Burn wound	1989	Basildon (UK)	Burns unit
RUH 436	NIPH 535 = LMG 10539	1-1	I	6	+	+	+	-	-	-	-	+	3.0	6	6	18	22	23	>32	8	0.5-1	2	Sputum	1984	Utrecht (NL)	ICU
RUH 3282	NIPH 536 = GNU 1079	1-1	I	11	+	+	+	+	-	-	-	+	3.0	6	6	7	19	6	>32	>64	2	>128	Tracheostomy	1990	Salford (UK)	ICU
RUH 3238	NIPH 529 = GNU 1084	1-1	I	6	+	+	+	-	-	-	-	+	3.0	6	6	17	19	20	>32	8	2	4	Burn wound	1987	Sheffield (UK)	Burns unit
RUH 3239	NIPH 530 = GNU 1083	1-1	I	6	+	+	+	-	-	-	-	+	3.0	6	6	13	16	18	>32	32	4	8	Urine	1985-88</td		

Strain designation	Other strain designations	<i>Hin</i> dIII- <i>Hin</i> cII ribotype	<i>Eco</i> RI ribotype *	Biotype †	PCR detection of resistance genes and <i>intI1</i>							5'-3' CS amplicon (kb)	Inhibit. zone diameters (mm) ‡					MIC range (µg/ml) §				Specimen	Date of isolation	City (country) §§	Specialty	
					<i>aacC1</i>	<i>aadA1</i>	<i>aphA1</i>	<i>aphA6</i>	<i>aadB</i>	<i>aacC2</i>	<i>aacA4</i>		Kan ≤13	Gen ≤12	Net ≤12	Tob ≤12	Ami ≤14	Gen ≥16	Net ≥32	Tob ≥16	Ami ≥64					
<i>Czech clone II strains (n=21)</i>																										
NIPH 24	LUH 3788 = CCM 7033 = LMG 22457	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	6	13	16	16	>32	32	4-8	8-16	Urinary catheter	9/1991	Praha 1 (CZ)	Burns unit
NIPH 141	LUH 4578	2-2	II	2	+	+	-	-	-	-	-	+	2.5	23	8	17	19	22	>32	8	2	2	Intravenous cannula	6/1993	Praha 1 (CZ)	Neurological ICU
NIPH 220	LUH 4586	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	6	6	8	8	>32	>64	>16	128	Lung dissection	1/1993	Kladno (CZ)	Neonatology
NIPH 330	LUH 4603	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	6	16	19	20	>32	8	2	2-4	Pus	7/1994	Tábor (CZ)	Orthopaedic
NIPH 455	LUH 4623	2-2	II	2	+	+	+	+	-	-	-	+	2.5	6	7	16	19	8	>32	8	2	128	Blood	9/1996	Jihlava (CZ)	ICU
NIPH 471	LUH 4625	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	7	17	19	21	>32	8	2	2	Bronchial secretion	1/1997	Č. Budějovice (CZ)	ICU
NIPH 499	LUH 8964	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	7	18	20	21	>32	4-8	2	2	Sputum	4/1997	Příbram 2 (CZ)	ICU
NIPH 657	LUH 4629 = CCM 7117	6-4	X (II)	2	+	+	+	+	-	-	-	+	2.5	6	7	16	18	8	>32	8	2	128	Tracheostomy	4/1996	Praha 1 (CZ)	Neurology
NIPH 720	LUH 8965	6-4	X (II)	2	+	+	+	+	-	-	-	+	2.5	6	7	17	20	10	>32	8	2	64	Bronchial secretion	7/1997	Č. Budějovice (CZ)	Paediatrics ICU
NIPH 732	LUH 8966	6-4	X (II)	2	+	+	+	+	-	-	-	+	2.5	6	7	17	20	10	>32	8	2	64	Bronchial secretion	9/1997	Č. Krumlov (CZ)	ICU
NIPH 1362	LUH 7855 = CCM 7118	4-2	XI	2	-	-	-	-	-	-	-	-	24	17	16	22	23	2-4	8-16	1	1-2	Tracheal aspirate	1/2000	Praha 3 (CZ)	Surgery ICU	
NIPH 1462	LUH 7856	2-2	II	2	-	-	+	-	-	-	-	-	7	20	23	21	23	0.5-1	1	0.5-1	1	Sputum	1/2001	Tábor (CZ)	ICU	
NIPH 1469	LUH 7858	4-2	XI	2	-	-	-	+	-	-	-	-	6	16	15	21	9	2-4	8-16	1	128	Sputum	1/2001	Praha 2 (CZ)	Surgery ICU	
NIPH 1511	LUH 8972	2-5	XIII	2	+	+	+	-	-	-	-	+	3.0	6	6	14	19	20	>32	16	2	4	Drainage fluid	3/2001	Praha 4 (CZ)	Surgery ICU
NIPH 1523	LUH 8974	6-4	X (II)	2	+	+	+	+	-	-	-	+	2.5	6	6	16	19	10	>32	8	2	64	Sputum	4/2001	Havlíčkův Brod (CZ)	ICU
NIPH 1526	LUH 7863	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	7	17	19	20	>32	8	2	4	Wound swab	4/2001	Blansko (CZ)	
NIPH 1567	LUH 8975	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	7	16	19	21	>32	8	2	4	Blood	1/2001	Jihlava (CZ)	Surgery
NIPH 1628	LUH 8405	2-4	II	2	-	-	-	-	-	-	-	-	24	16	17	21	21	4	8	1-2	2	Blood	9/2001	Praha 1 (CZ)	ICU	
NIPH 1629	LUH 7867	2-5	XIII	2	+	+	+	-	-	-	-	+	3.0	6	7	14	19	20	>32	16-32	2	2-4	Blood	9/2001	Praha 1 (CZ)	ICU
NIPH 1696	LUH 8978	2-2	II	2	+	+	+	-	-	-	-	+	2.5	6	7	16	18	20	>32	8	2	2-4	Urine	6/2001	Praha 3 (CZ)	Surgery ICU
NIPH 1711	LUH 7870	4-2	2	-	-	-	-	-	-	-	-	-	25	17	15	21	22	2	16	1	1	Nasal swab	7/2001	Praha 3 (CZ)	ICU	
<i>Non-Czech clone II strains (n=15)</i>																										
RUH 134	NIPH 528 = LMG 10541	2-2	II	1	+	+	+	-	-	-	-	+	3.0	6	7	18	19	21	32	8	2	2-4	Urine	1982	Rotterdam (NL)	ICU
RUH 3240	NIPH 537 = GNU 1086	4-2	XI	2	+	+	-	-	-	-	-	+	2.5	23	7	11	17	21	>32	32-64	4	4	Respiratory tract	1989	Newcastle (UK)	ICU
RUH 3422	NIPH 538 = PGS 189	2-2	II	2	-	-	+	-	-	-	-	-	6	19	23	21	23	1	1	1	1	Ulcer	1984	Odense (DK)	ICU	
RUH 3245	NIPH 539 = GNU 1080	2-2	II	9	-	-	-	-	-	-	-	+	24	6	9	16	23	>32	64	4	1-2	Urinary catheter	1989	Salisbury (UK)	Neurology	
LUH 1245	NIH 780	2-2	II	2	+	+	+	-	+	-	-	+	2.5	6	6	15	6	21	>32	16	>16	4	Trachea	11/1993	Debrecen (HU)	
LUH 1398	NIPH 823	2-2	II	2	+	+	+	+	-	-	-	+	2.5	6	7	19	21	9	32	4	1	64	Throat	11/1997	St. Zagora (BG)	
LUH 6034	NIPH 1657 = 17C003	2-2	II	2	-	-	-	+	-	+	-	-	6	6	8	13	8	>32	64	8	64-128	Sputum	5/1998	Madrid (ES)		
LUH 6021	NIPH 1666 = 14C003	2-2	II	2	+	+	+	+	-	-	-	+	2.5	6	8	19	22	11	32	4	1	32-64	Sputum	12/1998	Krakow (PL)	
LUH 6126	NIPH 1652 = 15A250	2-4	II	1	-	-	-	-	-	-	-	-	23	12	8	18	20	8-16	>64	2	4	Blood	5/1998	Coimbra (PT)		
LUH 6011	NIPH 1660 - 09A242	4-21	XI	1	-	-	+	-	-	-	-	+	2.2	6	13	7	10	18	8	>64	>16	4-8	Blood	11/1997	Athens (GR)	
LUH 5868	NIPH 1667 = 06A102	2-22	II	2	-	-	+	-	-	-	-	-	6	7	6	6	11	32	>64	>16	64	Blood	7/1997	Lille (FR)		
LUH 5865	NIPH 1651 = 18C132	26-2	II	2	-	-	-	-	+	-	-	-	23	6	9	14	22	>32	64	8	2	Sputum	4/1998	Barcelona (ES)		
LUH 6024	NIPH 1653 = 16A502	26-2	II	2	-	-	-	+	-	+	-	-	6	6	10	16	8	>32	64	4	128	Blood	9/1998	Seville (ES)		
LUH 6044	NIPH 1654 = 18C103	26-2	II	2	-	-	-	+	-	+	-	-	6	6	7	11	9	>32	>64	>16	64-128	Sputum	4/1998	Barcelona (ES)		
LUH 6029	NIPH 1663 = 16D042	26-2	II	2	-	-	-	+	-	+	-	-	6	6	6	9	8	>32	>64	>16	64	Blood	7/1998	Seville (ES)		
<i>Clone III strains (n=6)</i>																										
LUH 6028	NIPH 1648 = 16D025	25-1	XVI	9	-	-	-	+	+	-	-	+	0.75	6	6	17	7	12	>32	8-16	>16	64	Wound	7/1997	Seville (ES)	
LUH 6037	NIPH 1650 = 18A155	25-1	XVI	9	-	-	-	+	+	-	-	+	0.75	6	6	16	7	13	>32	8	>16	32-64	Blood	8/1997	Barcelona (ES)	
LUH 6035	NIPH 1655 = 17C085	25-1	XVI	9	-	-	-	+	+	-	-	+	0.75	6	6	17	8	10	>32	8-16	>16	128	Sputum	2/1998	Madrid (ES)	
LUH 6009	NIPH 1665 = 04C048	25-1	XVI	9	-	-	-	+	+	-	-	+	0.75	6	6	16	8	10	>32	16	>16	128	Sputum	7/1997	Paris (FR)	
LUH 5874	NIPH 1668 = 06A201	25-1	XVI	9	-	-	-	+	+	-	-	+	0.75	6	6	19	9	14	>32	4	>16	32	Blood	11/1997	Lille (FR)	
LUH 5875	NIPH 1669 = 12A133	25-1	XVI	9	-	-	-	+	+	-	-	+	0.75	6	6	15	7	9	>32	16	>16	64	Blood	1/1997	Utrecht (NL)	
<i>Other Czech multi-drug resistant strains (n=8)</i>																										
NIPH 47	LUH 4630	8-1	u	6	-	-	+	-	+	-	-	-	6	6	18	8	21	>32	4-8	>16	2	Burn	12/1991	Praha 1 (CZ)	Burns unit	
NIPH 301	LUH 7852 = LMG 22459	2-7	u	6	-	-	+	-	-	-	-	-	6	6	12	15	20	>32	32	4-8	2	Sputum	6/1994	Slaný (CZ)	ICU	
NIPH 335	LUH 4641	21-16	u	9	-	-	-	-	+	-	-	-	11	9	24	9	22	16-32	0.5	>16	1	Sputum	7/1994	Tábor (CZ)	Nursing home	
NIPH 1445	LUH 8403	21-16	u	9	-	-	+	-	+	-	-	-	6	9	25	11	23	16	0.25-0.5	16	1	Sputum	7/2000	Plzeň (CZ)	ICU	
NIPH 1497	LUH 7859	23-19	XIV	6																						