

Number of records: 11

Ordered by: Meteorite Name

Name, Locaton: MAC 88105, MacAlpine Hills, Antarctica [84°13'S, 160°30'E, approx.]**Date of find:** 1988**total known weight:** 0.6625kg**Classification:** ALUN-A, Lunar highland anorthosite
regolith microbreccia

Pairing Name, Sample	Cosmogenic Radionuclides [dpm/kg material]						Cosmogenic Noble Gases [10 ⁻⁸ cm ³ STP/g]			Terrestrial Age [ka]	Analysis Remarks
	¹⁰ Be	²⁶ Al	³⁶ Cl	⁴¹ Ca	⁵³ Mn	¹⁴ C	²¹ Ne	²² Ne/ ²¹ Ne	⁴ He/ ²¹ Ne		
MAC 88104, 11 (bulk)	2.3±0.2		3.2±0.2								
MAC 88105, 24 (bulk)	1.7±0.1	14.4±2.1	2.8±0.3								
Reference.: Eugster O., Beer J., Finkel R. C., Hofmann J., Michel T., Synal A. and Wölfli W. (1990) Characterization of noble gases in lunar meteorites Yamato-793274 and radionuclides in MAC88104/5. Meteoritics 25, 362-363 (abs.).											
MAC 88105, 24 (bulk)	1.7±0.1	14.4±2.1	2.8±0.3				10.7	1.20		36Cl terr. age: 230±20	
MAC 88104, 11 (bulk)	2.3±0.2		3.2±0.2				12.8	1.22		36Cl terr. age: 350±250	
Reference.: Eugster O., Beer J., Burger M., Finkel R. C., Hofmann J., Krähenbühl U., Michel T., Synal A. and Wölfli W. (1991) History of the paired lunar meteorites MAC88104 and MAC88105 derived from noble gas isotopes, radionuclides, and some chemical abundances. Geochim. Cosmochim. Acta 55, 3139-3148.											
MAC 88105 (bulk)						0.25±0.07				14C terr. age: 37	14C terr. age > 37
Reference.: Jull A. J. T. and Donahue D. J. (1991) Carbon-14 content of the Antarctic meteorite, MacAlpine Hills 88105. Geochim. Cosmochim. Acta 55, 2681-2682.											
MAC 88104, 9 (bulk)	2.33±0.11	16.1±1.0	3.29±0.17	15.9±0.9						36Cl terr. age: 230±20	
MAC 88105, 25 (bulk)	2.01±0.08	16.0±1.0	3.41±0.27	17.7±1.0						36Cl terr. age: 230±20	
MAC 88105, 19 (bulk)	2.45±0.10	20.3±1.2	3.57±0.22	16.5±0.7						36Cl terr. age: 230±20	
Reference.: Nishiizumi K., Arnold J. R., Klein J., Fink D., Middleton R., Sharma P. and Kubik P. W. (1991) Cosmic ray exposure history of lunar meteorite Yamato 793274. Papers 16th NIPR Symp. Ant. Met., 188-190 (abs.). See also: Nishiizumi K., Arnold J. R., Klein J., Fink D., Middleton R., Kubik P. W., Sharma P., Elmore D. and Reedy R. C. (1991) Exposure histories of lunar meteorites: ALHA81005, MAC88104, MAC88105, and Y791197. Geochim. Cosmochim. Acta 55, 3149-3155.											
MAC 88104, 14 (bulk)	1.97±0.12	14.6±1.2	4.6±0.6	14.8±1.2			12.8	1.22		36Cl terr. age: 145±45	
MAC 88105, 41 (bulk)	2.04±0.12	16.0±1.3	4.2±0.5	16.2±1.3			10.7	1.20		36Cl terr. age: 145±45	
Reference.: Vogt S., Fink D., Klein J., Middleton R., Dockhorn B., Korschinek G., Nolte E. and Herzog G. F. (1991) Exposure histories of the lunar meteorites: MAC88104, MAC88105, Y791197, and Y86032. Geochim. Cosmochim. Acta 55, 3157-3165. (CNGs): Eugster O., Beer J., Burger M., Finkel R. C., Hofmann H. J., Krähenbühl U., Michel, Th., Synal H. A. and Wölfli W. (1991) History of the paired lunar meteorites MAC 88104 and MAC											

88105 derived from noble gas isotopes, radionuclides and some chemical abundance. Geochim. Cosmochim. Acta 55, 3139-3148.

MAC 88105 (bulk)		19.5±2.6									
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Reference.: Wacker J. F. (1990). 26Al Activity Data for Antarctic Meteorites. Antarctic Meteorite Newsletter 13(2), 28-29. NASA JSC, Houston.