

# Audiogram of the guinea pig (*Cavia porcellus*)

**Data from:** Heffner, R., Heffner, H., and Masterton R.B.(1971) Behavioral measurement of absolute and frequency-difference thresholds in guinea pig. *Journal of the Acoustical Society of America*, 49,1888-1895.

## Absolute thresholds (in dB re 20 $\mu\text{N/m}^2$ ) for four pigmented guinea pigs (designated A through D)

Frequency (in kHz)	Individual Thresholds (in dB)				Average
	A	B	C	D	
.054	56	50	—	—	53
.063	46	45	51	56	50
.125	36	32	55	53	44
.250	25	25	38	46	34
.500	28	19	21	32	25
1	20	0	17	18	14
2	12	5	25	24	16
4	16	6	15	23	15
8	-13	-14	-8	-5	-10
16	9	-10	3	15	4
32	13	16	5	16	12
42	36	32	—	—	34
50	64	62	61	64	63

## Lowest and highest frequencies audible at sound pressure levels (SPL) ranging from 30 to 70 dB SPL

SPL (in dB)	Lowest audible frequency (in kHz)	Highest audible frequency (in kHz)
70	—	51
60	.047	49
50	.063	46.5
40	.165	43.5
30	.320	40

### Additional Parameters:

**Body weight** = 600 g

**Functional interaural distance**= 160  $\mu\text{s}$

(Time required for sound to travel around the head from one auditory meatus to the other.)

**Comments:** Threshold values taken from original data.

For another audiogram, see Prosen, C.A., Petersen, M., Moody, D., and Stebbins, W. (1978) Auditory thresholds and kanamycin-induced hearing loss in the guinea pig assessed by a positive reinforcement procedure. *Journal of the Acoustical Society of America*, 63, 559-556.