

	Structure	Location	Adaptation	Receptive field	Function
Free nerve ending	---	In the skin and other tissues	---	---	Detects touch and pressure
Meissner's corpuscle	Encapsulated nerve ending	In the dermis of non hairy skin (lips + fingertips). In locations where tactile discrimination is especially good.	Rapidly adapting	Small receptive field	Sensitive to moving objects and low frequency vibrations
Merkel's disc	Expanded tip tactile receptors. Grouped in touch domes	Fingertips and hairy skin	Slowly adapting	Small receptive field	Determine continuous touch of objects against the skin
Ruffini ending	Multibranched encapsulated nerve endings	In the dermis of hairy and non hairy skin and joint capsules	Slowly adapting	Large receptive field	Detects heavy prolonged touch and pressure signals, stretch and joint rotation
Pacinian corpuscle	---	In the dermis, subcutaneous layers of hairy , non hairy skin and muscles	The most rapidly adapting of tactile receptors	---	Detects tissue vibration or other rapid changes in the mechanical state of the tissues (velocity)
Hair end organ	---	---	Adapt quickly	---	Detects velocity and direction of movement across the skin