

**DM3539P**
**Monoclonal Antibody to Desert hedgehog / DHH (N-term) - Purified**

**Alternate names:** HHG-3

**Quantity:** 0.1 mg

**Background:** Desert Hedgehog (Dhh) belongs to the highly conserved Hedgehog family of proteins which are involved in multiple developmental processes. Hedgehogs are synthesized as 45 kDa precursors that are cleaved autocatalytically. The 19 kDa Nterminal fragment remains membrane associated due to its cholesterol and palmitate modifications. Binding of this fragment to Patched receptors results in the loss of Patched repression of Smoothened signaling. Dhh binds both Patched and Patched 2 as well as Hedgehog interacting protein (Hip). Within the N-terminal peptide, mouse Dhh shares 97% and 100% amino acid (aa) sequence identity with human and rat Dhh, respectively. It shares 74% aa sequence identity with mouse Indian (Ihh) and Sonic hedgehog (Shh). Dhh is produced by Sertoli cells and is required for testis development and spermatogenesis. It induces steroidogenic factor 1 which is instrumental in promoting Leydig cell differentiation. It also promotes the deposition of basal lamina surrounding seminiferous tubules. In humans, mutations of Dhh are associated with pure gonadal dysgenesis. Dhh is expressed in the female by ovarian granulosa cells and the corpus luteum. Its upregulation in human ovarian cancer correlates positively with proliferative index and negatively with prognosis. Dhh is also expressed by Schwann cells and is upregulated following nerve injury. It induces the expression of Patched and Hip in nerve fibroblasts and promotes the formation of the connective tissue sheath surrounding peripheral nerves.

**Uniprot ID:** [Q61488](#)

**NCBI:** [NP\\_031883.1](#)

**GeneID:** [13363](#)

**Host / Isotype:** Rat / IgG2

**Clone:** 6A12

**Immunogen:** Purified Mouse Recombinant DHH N-terminal fragment

**Format:** **State:** Lyophilized purified IgG fraction from culture supernatant

**Purification:** Protein A/G affinity chromatography

**Buffer System:** 0.2 µm filtered PBS solution

**Stabilizers:** None

**Reconstitution:** Restore with 200µl sterile PBS and the final concentration is 500µg/ml.

**Applications:** **Western Blot:** 1/500 - 1/1000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody detects Mouse DHH N-terminal polypeptide, but not C-terminal one in Western blotting.

**Species:** Mouse.

Other species not tested.

**Storage:** Prior to reconstitution store at 2-8°C.  
Following reconstitution store undiluted at 2-8°C for one month  
or (in aliquots) at -20°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.