



Cytokeratin Pan-OSCAR

IHC of CK OSCAR on an FFPE Colon Carcinoma Tissue

Description Anti-Cytokeratin OSCAR is well-suited to distinguish Epithelial Carcinoma from Non-epithelial malignancies and is used to aid Epithelial Tumor classification. Anti-Cytokeratin OSCAR identifies a number of bands corresponding to cytokeratins 7, 8, 18 and 19 (additional bands – cytokeratins – may also be detected). This antibody has been used to characterize the source of various neoplasms and to study the distribution of keratin-containing cells in epithelia during normal development and during the development of epithelial neoplasms.

In normal tissues, OSCAR is reactive with most epithelial types tested including bile ducts and hepatocytes in liver, bladder epithelium, breast ducts, bronchial epithelium, endometrium, follicular dendritic cells of lymph node and tonsil, intestinal epithelium of the stomach, duodenum, ileum, colon, rectum, pancreas, ovarian epithelium, pancreatic acini, pituitary acini, pneumocytes, prostate, thyroid and skin. In tumors, OSCAR is reactive with most Carcinomas including Breast, TCC, RCC, Lung, Endometrial CA, Prostate CA, Ovarian CA, HCC, Colorectal CA, Stomach CA and Thyroid CA. It is negative in certain normal tissues including brain, lymphocytes and all cells of hematolymphoid origin, muscle, brain, nerves, endothelium and in certain tumors including Melanoma, Sarcoma, Lymphoma, PNET/Ewing's and GIST. This antibody has shown high sensitivity in recognizing epithelial cells and carcinomas.

Antibody Type	Mouse Monoclonal	Clone	OSCAR
Isotype	IgG2a	Reactivity	Paraffin, Frozen
Localization	Cytoplasmic	Control	Prostate, Skin, Colon, Stomach
Storage	Store at 2°-8°C	Stability	2 years

For long-term storage of the concentrated antibody, it is recommended that aliquots of the antibody be frozen at -20°C in glycerol 50% (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Dilute using an antibody diluent such as ImmunoDetector Protein Block/Antibody Diluent (BSB 0040 and BSB 0041) or ImmunoDNA Background Blocker (BSB 0103-BSB 0107).

Presentation Cytokeratin OSCAR is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Availability	Catalog No.	Antibody Type	Dilution	Volume/QTY
	BSB 6177	Prediluted	Ready-To-Use	3.0 ml
	BSB 6178	Prediluted	Ready-To-Use	7.0 ml
	BSB 6179	Prediluted	Ready-To-Use	15.0 ml
	BSB 6180	Concentrated	1:25-1:100	0.1 ml
	BSB 6181	Concentrated	1:25-1:100	0.5 ml
	BSB 6182	Concentrated	1:25-1:100	1.0 ml
	BSB 6183	Control Slides		5

Note: For concentrated antibodies, please centrifuge prior to use to ensure recovery of all product.

- References**
1. Battifora H, *Am J Surg Pathol*. 1988;12:24
 2. Gown AM, et al. *Am J Clin Pathol*. 1985;84:413
 3. Knapp AC, et al. *Cell*. 1989;59:67-79
 4. Lewis JE, et al. *Hum Pathol*. 1997;Jun;28(6):664-73
 5. Mueller JD, et al. *Cancer*. 2000;Nov1;89(9):1874-82
 6. Sato F, et al. *Br J Surg*. 2001;Mar;88(3):426-32

Protocol Suggested protocol on reverse

Recommended Immunohistochemical Protocol

- Pretreatment**
1. Cut and mount 3-4 micron formalin-fixed paraffin-embedded tissues on positive charged slides.
 2. Air dry for 2 hours at 58° C.
 3. Deparaffinize, dehydrate and rehydrate tissues.
 4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as **ImmunoDNA Retriever with Citrate** (BSB 0020-BSB 0023) or **EDTA** (BSB 0030-BSB 0033).
 5. Any of three heating methods may be used:
 - a. **Electric Pressure Cooker**
Place standoff rack at base of pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high, and incubate for 15 minutes. Open and immediately transfer slides to room temperature.
 - b. **Water Bath Method**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the **ImmunoDNA Retriever with Citrate** or **EDTA** in a water bath set at 95°-99° C. Incubate for 30-60 minutes.
 - c. **Conventional Steamer Method**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the **ImmunoDNA Retriever with Citrate** or **EDTA** in a Steamer, cover and steam for 30-60 minutes.
 6. After heat treatment, transfer slides in **ImmunoDNA Retriever with Citrate** or **EDTA** to room temperature and let stand for 15-20 minutes.
 7. Wash slides with IHC wash buffer or DI water.
 8. Continue IHC staining protocol.

Immunohistochemical Protocol

Step	ImmunoDetector (AP or HRP)	PolyDetector (AP or HRP)
Peroxidase/AP Block	5 minutes	5 minutes
Primary Antibody	30 minutes	45 minutes
Secondary Biotinylated Link	10 minutes	Not Applicable
AP or HRP Label	10 minutes	45 minutes
Substrate-Chromogen	5-10 minutes	10 minutes
Counterstaining	Time varies with counterstain	Time varies with counterstain

